



PATENT  
P51671RE

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF APPEALS AND INTERFERENCES**

In re Application of: JIN-SU PARK

Original Patent: U.S. Patent No. 5,719,618 issued on 17 February 1998

Serial No.: 09/506,288

Examiner: ISSING, GREGORY C.

Filed: 17 February 2000

Art Unit: 3662

For: LOCKING METHOD FOR A SYSTEM WITH AN ON SCREEN DISPLAY  
FUNCTION AND APPARATUS THEREFOR

**TRANSMITTAL OF APPEAL BRIEF FEE**

**Mail Stop Appeal Brief-Patents**

Commissioner for Patents

P.O.Box 1450

Alexandria, VA 22313-1450

Sir:

Appeal was reinstated on 26 July 2007 under MPEP §1204.01.

Accordingly, no fee is incurred by filing of the accompanying Appeal Brief.

Respectfully submitted,

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Folio: P51671RE

Date: 26 October 2007

I.D.: REB/kf



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For: LOCKING METHOD FOR A SYSTEM WITH AN ON SCREEN DISPLAY  
FUNCTION AND APPARATUS THEREFOR

**Attn: Board of Patent Appeals & Interferences**

**Paper No. 52**

**APPEAL BRIEF**

**Mail Stop Appeal Brief-Patents**

Commissioner for Patents

P.O.Box 1450

Alexandria, VA 22313-1450

Sir:

Pursuant to Appellant's Notice of Appeal filed on 26 July 2007, Appellant hereby appeals to the Board of Patent Appeals and Interferences from the rejection of claims 1-33 and 35-59 as set forth in the final Office action mailed on 26 January 2007 (Paper No. 20070116). The period for filing an Appeal Brief is being extended by a Petition for Extension of Time and its appropriate fee concurrently submitted with this Appeal Brief.

Folio: P51671RE

Date: 10/26/07

I.D.: REB/kf



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PATENT  
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**I. REAL PARTY IN INTEREST**

Pursuant to 37 CFR §41.37(c)(1)(as amended), the real party in interest is:

Samsung Electronics Co., Ltd.  
#416, Maetan-dong, Yeongtong-gu  
Suwon-si, Gyeonggi-do, Republic of KOREA

as evidenced by the Assignment executed by the inventor on 5 August 1989 and recorded  
in the U.S. Patent & Trademark Office on 28 August 1989 at Reel 5697, frame 121/122.



## **II. RELATED APPEALS AND INTERFERENCES**

A Notice of Appeal has been filed from the final rejection in Appellant's co-pending U.S. Patent Application assigned Serial No. 10/337.364.

### **III. STATUS OF CLAIMS**

Claims 1 through 59 are pending. Claims 1 through 33 and 35 through 59 stand finally rejected. Of the latter claims, claims 1, 2, 4, 7, 8, 9, 15, 20 through 22, 24, 27 through 29, 35, 44, 48, 55, 56 and 59 are independent, whereas the remaining claims are dependent.

#### **Listing of the Claims**

Pursuant to 37 CFR §121(c), the claim listing, including the text of the claims, will serve to replace all prior versions of the claims, in this application.

#### **Amendment of the Claims**

No claims are amended via this Paper.

#### **Status of Claims and Support for Claim Amendments**

The foregoing listing of claims presents all of the pending claims pursuant to 37 CFR §121(c), bearing corrected status are attached to the Appendix annexed to this paper.

#### **IV. STATUS OF AMENDMENTS**

In an Amendment filed on 21<sup>st</sup> of August 2006, claims 4 through 6 and 44 were amended.  
This amendment was entered.

No amendments of claims were made subsequent to the final Office action mailed 26  
January 2007 (Paper No. 20070116).

## V. SUMMARY OF CLAIMED SUBJECT MATTER

FIG. 1 is a system diagram of the locking method in accordance with the present invention. (Column 2, lines 20-34). The drawing shows procedures such as, 11--waiting for lock-function call; 12--storing and displaying the secret code input to the above procedure 11; 13 – checking if the system is in the locked state as soon as the above secret code input is completed; 14 – if the system is not in the locked state in the above procedure 12, the system converts for storing of the secret-code and for setting to the locked state; 15 – if it is in the locked state in the above procedure 13, the stored secret code is compared with the already memorized code, to see if they match; 16--if the secret codes don't match, display the error message; 17 – if the secret codes match; the system is unlocked.

FIG. 2 is a circuit diagram of VTR suitable for employing the method of this invention (Column 2, lines 35-59). It consists of a microcomputer 100 that controls the VTR system; a key matrix 101 that conveys the information provided by the viewer to the above microcomputer 100; a remote-control receiver 102 that receives and transforms the transmitted remote-control signals to digital key-data, and conveys it to the microcomputer 100; a video-signal processing unit 103 that reproduces and outputs the video-signal (to be called 'the 1st video signal' from now on) recorded on the video tape; a voice-processing unit 104 that reproduces the video tape's voice signals and transmits them to the television set; a character-generator circuit 105 that obtains from the microcomputer 100 data for characters and generates a video signal (to be called the 2nd video signal from now on) that forms character-data for the screen; a mixer 106 that receives and mixes the 1st and 2nd video signals from the video-signal processing unit and the character-generator circuit, respectively, to output them to the television set; a video-mute circuit 107 that consists of a transistor Q1 and two resistors R1 and R2 and, under the microcomputer's control, mutes the video-processing unit's output; and a voice-mute unit 108 that consists of a transistor Q2 and three resistor R3-R5 and, under the microcomputers control, mutes the voice signals from the voice-processing unit 104.

Turning to FIG. 2 (Column 2, line 62-Column 3, line 18), keyboard 101 generates key data equivalent to the information input by the viewer and outputs it to the microcomputer 100. The remote-control receiver 102 receives the remote-control signals for key-data transmitted from remote-control transmitter, transforms them into digital key-data and outputs the latter to the microcomputer 100. The microcomputer 100 controls the system, as dictated by its built-in program according to the key-data inputted either from the keyboard 101 via bus line 1 or from the above remote-control receiver 102 via bus line 2. The video-processing unit 103 extracts the video program recorded on the video tape, demodulates the 1st video signal and outputs it to the mixer 106 via line 6. The voice-processing unit 104 extracts the video program recorded on the video tape, demodulates the voice signal included in the video program and outputs it to the television set, via line 8. The character-generator circuit 105 generates the 2nd video signal that forms the character-information for the screen by obtaining the system-clock and strobe signals from the microcomputer 100 via three lines 3-5, together with the character-data input. The circuit then outputs the signal to the mixer 106 via line 7. The mixer 106, in turn, mixes the output from the video-processing unit 103 with the output of the character generator circuit 105, for output to the television set via line 121.

The video-mute unit 107 consists of two resistors R1 and R2 and a transistor Q1. (Column 3, lines 19-20). It mutes the output of the video-processing unit 103, that is, the 1st video signal on line 6, according to the video-mute control signal received from the microcomputer via line 9. If the logic status of the video-mute control signal is high, the 1st video signal on line 6 is muted and kept from being input to the mixer 106. On the contrary, if it is low, the transistor Q1 goes off, and the 1st video signal on line 6 is input to the mixer 106. (Column 3, lines 20-25). The voice-mute unit 108 consists of three resistors R3-R5 and a transistor Q2. It controls the audio-processing unit 104 according to the microcomputer's audio-mute control signal received via line 10. If the logic status of the microcomputer's audio-mute control signal, is high, a mute signal of low-logic status is generated and sent via line 11 to the audio-processing unit 104 to enable it to mute the audio signal. On the contrary, if it is low, a mute signal of high-logic status

is generated and sent via line 11 to the audio-processing unit 104 to enable it to output the audio signal to the television set. (Column 3, lines 25-38).

The lock-function executed by a micro-computer as illustrated in the FIG. 3 will be explained in detail while also referring to FIG. 2 and FIG. 4. (Column 3, lines 39-41).

While executing the main program, the micom 100 checks if the system's power-off flag is set to "1" to determine the main-power status. If the mains-power status is on, with its system power-flag set to "0", it returns to the main program (step 200). On the contrary, if the flag is set to "1", i.e., power-standby status, it determines if there is key input by checking the key-data input from keyboard 101 or remote-control receiver 102 through bus line 1 or bus line 2(step 201). (Column 3, lines 42-50).

If there is no key-data input in the above step 201, the micom 100 returns to the main program. If there is key-data input, it checks if the key data concerns the lock key. if not, the micom 100 returns to the main program(step 202). (Column 3, lines 43-50).

If the key data input in the above step 202 concerns the lock key, the micom 100 executes steps 203-227 to display the multi-digit secret-code prompt screen on the television set, through the character-generator circuit 105 and stores the sequentially-input secret codes on the registers. (Column 3, lines 56-60).

Micom (*e.g.*, microcomputer) 100 checks the value of its built-in secret-code digit counter in steps 203-206, to see if it should wait for the secret-code input, or to determine which digit of the secret code should be input. (Column 3, lines 62-65).

If the value of the secret-code digit counter is "0" in step 203, the value is increased by "1" (step 207). The character data for the cue display for the first digit of the secret code, together

with system clock and strobe signals, are sent to the character-generator 105 via three lines 3-5 (as in step 300 of FIG. 4). The character-generator 105 forms the 2nd video signal (as in step 300 of FIG. 4) and sends it via line 7, the the mixer 106 and line 12 to the television set. (Column 3, line 66-Column 4, line 6) The viewer is then required to input the first of the secret code (step 208). If the value of the secret-code digit counter is "1" in the step 204, the micom 100 recognizes this as the input prompt for the first digit of the secret code. It then checks for the key data is inputted from the keyboard 101 or remote-control receiver 102(step 209). (Column 4, lines 6-12) If key data is inputted, it checks whether the key data is a numerical key (0-9)(step 210). If the key data input in the above step 210 is a numerical key, the micom 100 stores the number in the first-digit register as the first digit of the secret code (step 211). (Column 4, lines 12-17) The value of the digit counter is then increased by "1" (step 212) and the character data for the secret code's second-digit prompt display such as 301 as shown in FIG. 4 is sent to the character-generator 105. The micom (100) makes the character-generator (105) send the character-data via mixer (106) to the television set to prompt for the second digit of the secret code, and returns to step 203 (step 213). (Column 4, lines 17-23).

If the value of the secret-code digit counter is "2" in step 205, the micom 100 recognizes this as the input prompt for the second digit of the secret code. It then checks for the key data from the keyboard 101 or remote-control receiver 102 (step 214). If key data is input, it is checked to determine if it is a numerical key (0-9)(step 215). (Column 4, lines 24-29) If the key data input in the above step 215 is a numerical key, the micom 100 stores the number in the second-digit register as the second digit of the secret code (step 216). (Column 4, lines 29-32) The value of the digit counter is then increased by "1" (stet 217) and the character data for the secret code's third-digit prompt display such as 302 as shown in FIG. 4 is sent to the character-generator 105. The micom 100 makes the character-generator 105 send the character data via mixer 106 to the television set to prompt for the third digit of the secret code and returns to step 203 (step 218). (Column 4, lines 32-39).

If the value of the secret-code digit counter is "3" in the above step 206, the micom 100 recognizes this as the input prompt for the third digit of secret code. It then checks whether the key data is input from the keyboard 101 or remote-control receiver 102 (step 219). If key data is input; it checks if it is a numerical key (0-9)(step 220). If the key data input in the above step 220 is a numerical key, the micom 100 stores the number on the third-digit register as the third digit of the secret code (step 221). (cColumn 4, lines 40-48) The value of the digit counter is then increased by "1" (step 222) and the character data for the secret code's third-digit prompt display such as 303 as shown in FIG. 4 is sent to the character-generator 105. The micom makes the character-generator 105 send the character data via mixer 106 to the television set, as the prompt for the fourth digit of the secret code, and returns to step 203 (step 223). (Column 4, lines 48-55).

If the value of the secret-code digit counter is not "3" in the step 206, the micom 100 recognizes this as the input prompt for the fourth digit of the secret code. It then checks whether the key data is input from the keyboard 101 or remote-control receiver 102 (step 224). (Column 4, lines 56-60). If key data is input in the step 224, it checks whether it is a numerical key (0-9)(step 225). (Column 4, lines 60-62). If the key data input in the above, step 225 is a numerical key, the micom 100 stores the number on the fourth-digit register as the fourth digit of the secret code (step 226). (Column 4, lines 62-65). The character data for the secret code's fourth-digit prompt display such as 304 as shown in FIG. 4 is sent to the character-generator 105 (as in step 304 of FIG. 4). The micom makes the character-generator 105 send the character data via mixer 106 to the television set, to prompt for the fourth digit of the secret code (step 227). (Column 4, line 65-Column 5, line 3).

After executing step 227, the micom 100 checks if the lock flag is set to "1" to determine if the system is in the locked state (step 228). (Column 5, lines 4-6).

If the lock flag is reset to "0" in the step 228, the micom 100 judges the system to be set to the unlocked state and sets the reset lock flag to "1" to change the state to the locked state (step



229). (Column 5, lines 7-10). The video-mute and audio-mute control signals with high -logic states are then outputted via the respective lines 9 and 10 to the video-mute unit 107 and the audio-mute unit 108. (Column 5, lines 10-13). Thus, the video-mute unit (107) diverts the output of the video-processing unit 103 on line 6 to ground terminal, to prevent viewing of the video program. The audio-mute unit 108 generates a mute signal of low-logic state and sends it to the voice-processing unit 104 (step 230). The unit 104 prevents the voice data from being output, as the voice signal's output to the television set is barred by the low-logic state mute signal. (Column 5, lines 13-20).

After executing the above step 230, the micom 100 resets the value of its secret-code digit counter to "0" (step 231), stores the secret code, already stored in each digit register, in the memory's secret-code storage address (step 232) and stops the strobe signal going to the character-generator circuit 105 to clear the display of step 304 in the FIG. 4 (step 233). (Column 5, lines 721-28).

Meanwhile, if the lock flag is set to "1" in the step 228, the micom 100 judges that the system is already set to the locked status and compares the secret code temporarily stored in each digit's register with the secret code stored in the memory's secret-code storage address, to determine if an authorized viewer is accessing the system (step 234). (Column 5, lines 29-34).

In case the two secret codes don't match in the step 234, the micom 100 determine that an unauthorized viewer is accessing the system and resets the value of the secret-code digit counter to "0" (step 235). (Column 5, lines 35-38). It then sends the character data for error message (as shown in step 305 of FIG. 4) to the character-generator 105, to make it display the error-message through the mixer 106 on the TV set, for a certain period of time. The micom 100 then stops giving the strobe signal, to clear the error-message display as shown in step 305 of the FIG. 4 (step 236). (Column 5, lines 38-44).

If the two codes compared during step 234 are identical, micom 100 decides that an authorized viewer is accessing the stem and resets the lock flag to "0" to unlock the system (step 237). It then initializes the secret-code digit counter to "0" (step 238) and generates video- and audio-mute unit control signals low-logic status. (Column 5, lines 45-50). These may be output via each (9 and 10) to video-mute unit 107 and audio-mute unit 108. The video-mute unit's muting operation is deactivated, to enable the viewer to watch the video program, and audio-mute unit 108 changes the low-logic status of the mute signal to high-logic status and sends it to audio-processing unit 104 (step 239). (Column 5, lines 50-56). Audio-processing unit 104, prompted by the high-logic status audio-mute signal, transmits the audio signal to the television set to enable the viewer to hear the voice data. (Column 5, lines 56-59).

After executing step 239, micom 100 initializes the secret code temporally stored in each digit register to "0" (step 240), stops providing character-generator 105 with strobe signals to deactivate it, and clears the display (as shown in step 304 of the FIG. 4)(step 241). (Column 5, lines 60-64). As illustrated above, one of the main advantages of this implementation of the principles of the present invention lies in the fact that this implementation can bar unauthorized people from watching video programs, and unlocks the system to allow authorized people to view these programs, without requiring an additional display unit, by using the OSD function. (Column 5, line 64-Column 6, line 2).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

1. Claims 1 through 3, 8, 21 through 24, 27, 28, and 59 are provisionally rejected under 35 U.S.C. §101 as claiming the same invention as that of claims 1 through 3, 8, 20 through 23, 26, 27, and 43 of co-pending Application No. 10/337364.
2. Claims 4 through 7, 9 through 19, 25, 26, and 35 through 43 are provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 4 through 6 of co-pending Application No. 10/337,364.
3. Claims 20 and 44 through 58 are rejected under the first paragraph of 35 U.S.C. §112 as failing to comply with the enablement requirement.
4. Claims 20 and 44 through 58 are rejected under the first paragraph of 35 U.S.C. §112 as failing to comply with the written description requirement.
5. Claims 47, 50 through 52 and 58 are rejected under the second paragraph of 35 U.S.C. §112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellant regards as the invention.
6. Claims 9 through 13, 15 through 19, 24, 25, 29 through 33, 35 through 43 are rejected under 35 U.S.C. §103(a) as being rendered obvious, and unpatentable, over the Examiner's proposed combination of Rew, U.S. Patent No. 5,033,085 modified by Inagaki *et al.*, U.S. Patent No. 4,896,354.
7. Claims 20, 44, 45, 47 through 51 and 54 through 58 are rejected under 35 U.S.C. §251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based.

## VII. ARGUMENT

### **Double Patenting: Rejection of Claims 1 Through 3, 8, 21 Through 24, 27, 28 and 59 Under 35 U.S.C. §101**

In paragraph 9 of the final Office action (Paper No. 20070116), claims 1-3, 8, 21-24, 27, 28, and 59 are provisionally rejected under 35 U.S.C. §101 as claiming the same invention as that of claims 1-3, 8, 20-23, 26, 27, and 43 of co-pending Application Serial No. 10/337364.

In paragraph 10 of Paper No. 20070116, the Examiner responded to Appellant's explanation set forth in Section VI-A of the previous Amendment, by writing that;

“the Appellant alleges that the rejection under 35 USC 101 is moot since the claims have been correspondingly broadened. Appellant's arguments are not convincing and fail to provide any evidence of the differences in scope between the two applications. Appellant's assertion that a Terminal Disclaimer will be filed at the completion of the review of the instant application is not persuasive since a rejection under 35 USC §101 for claiming the same invention cannot be overcome by a Terminal Disclaimer. If Appellant maintains the argument regarding differences in scope he is required to specifically point to the claim language providing such distinctions between the two applications.”

- A. Claims 1 through 3, 7 through 19, 21 through 43 and 59 are provisionally rejected under 35 U.S.C. §101 as claiming the same invention as that of claims 1 through 3 and 7 through 43 of co-pending application Serial No. 10/337,364.**

In view of Appellant's foregoing amendments of claims 1 through 3, 7 through 19, 21 through 43 and 59 to correspondingly broaden the scope of coverage provided by these claims, this rejection is moot. Nothing in either Paper No. 20060207 nor Paper No. 20070116 addresses these distinctions, and the record is devoid of any demonstration by the Examining staff that these claims in fact claim the “same invention.” Moreover, nothing in 35 U.S.C. §101 denies an Appellant the right to have more than one patent covering different inventions or different aspects, features, implementations or embodiments of the principles of an invention described in a common specification. Withdrawal of this rejection is therefore respectfully urged.

**Rejection of Claims 4-7, 9-19, 25, 26 and 35-43 Under Non-Statutory Obviousness-Type Double Patenting**

In paragraph 12 of Paper No. 20070116, claims 4-7, 9-19, 25, 26, and 35-43 are provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 4-6 of copending Application No. 10/337,364.

The Examiner states that;

“Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 4-6 of the instant application is generic to claims 4-6 of the co-pending application and fully encompasses the scope of the co-pending claims and therefore anticipates the copending claims.”

The Examiner further states that;

“The claims are not distinct from claims 9-19, 24, 25, 34-42 of the copending application since the step of ‘selectively input from a keyboard or a remote control receiver’ is obvious in light of ‘selectively input by a user of the video system’ since the input by a keyboard necessitates the input of a user and there is no patentable distinction between ‘a microprocessor based controller’ and ‘a microcomputer’.”

The Examiner contends that Appellant has not provided any recitation of the distinction between the sets of claims in the present application and the co-pending application, Application Serial No. 10/337,364.

**B. Claims 4-6 are provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 4 through 6 of co-pending Application No. 10/337,364.**

The Examiner contends that “[a]lthough the conflicting claims are not identical, they are not patentably distinct from each other because one of ordinary skill in the art would find it obvious/know that a video cassette tape is a video storage medium and that a video tape recorder

is a video recorder.”

Under current U.S. practice, as defined by §804 of the *Manual of Patent Examining Procedure*, (8<sup>th</sup> Edition, Rev. 4) October 2005,

“If the ‘provisional’ double patenting rejection in one application is the only rejection remaining in the application, the Examiner should then withdraw that rejection and permit the application to issue as a patent ... .”

The Examiner noted however, that “this is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. Applicant has previously requested the Examiner to observe that at the time of the filing date of this application, all of claims 1 through 43 were allowable. It is noted that in view of Applicant’s demonstration below of the speciousness and technical deficiencies of the one outstanding art rejection, the sole issue of merit in this application is the provisional double patenting rejection. Applicant therefore renews its request that the Examiner remove the “provisional” double patenting rejection and to pass this application to issue. There is neither need nor necessity to cancel claims in Applicant’s patent application Serial No. 09/506,288 at this time, in view of the pendency of that application before the Board of Patent Appeals and Interferences of the U.S. Patent & Trademark Office. Moreover, the MPEP makes no such threshold requirement for withdrawal of this provisional rejection. Should Applicant’s co-pending application proceed to allowance upon completion of the pending appeal, these copied claims may then be timely cancelled from the parent application.

Upon completion of review of this re-issue application with Appellant’s co-pending Serial No. 10/337.364, a terminal disclaimer and, if indicated, a Supplemental Reissue Declaration from the Assignee, will be filed. In the interim, the Appellant has requested suspension of these formalities.

#### **VII. Rejection Of Claims 44-58 Under First Paragraph Of 37 C.F.R. §112 – Enablement**

In paragraph 22 of Paper No. 41, claims 44 through 58 are rejected under the *first*

paragraph of 35 U.S.C. §112 as allegedly “failing to comply with the enablement requirement.”

In support of this rejection, the Examiner argued that

“[t]he claim(s) contain subject matter which was not described in the specification in such a way as to enable one skilled in the art ... to mark and/or use the invention.”<sup>1</sup>

This rejection and the conclusion given by the Examining staff in support of this rejection, are unsupported by evidence in the record.

In support of this rejection the Examining staff wrote that,

“claims 44, 48, 55 and 56 set forth a process wherein a first lock key data signal is received and a second lock data key signal is received after the first lock key data signal, such receiving times being separated by an interval ... .”

It is unclear here whether the Examining staff is referring to the sequential input of lock key data signals illustrated by Figure 3A or to the successive input of lock key data signals illustrated by Figure 3B. In either event, this process is found in the progression of process steps 11 through 17 illustrated by Figure 1. Appellant notes however, that “receiving times being separated by an interval” is not language found in claims 44, 48, 55 or 56. Clarification in subsequent Office correspondence is respectfully requested. In view of the clear demonstration of enablement in the originally filed application of the inventions actual defined by claims 44, 48, 55 and 56, this rejection is unfounded; its withdrawal and allowance of claims 44 through 58 is respectfully requested.

#### **Claim 47**

In paragraph 17 of Paper No. 20070116, the Examiner states that the rejection is not overcome as Appellant has failed to show where a teaching is provided in the original specification for comparing an entered secret code to a stored code and subsequently locking audio while releasing muting of the video. The Examiner’s attention is respectfully invited to Figure 2, to note Appellants enabling teaching of operationally distinct Video Mute Circuit 107

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<sup>1</sup> Paper No. 41, page 10.

and to Audio Mute Circuit 108, and to Appellant's teaching of different control leads 9, 10 applied by MICOM 100 to separately control the base electrodes respectively, of Video Mute Circuit 107 and to Audio Mute Circuit 108. This is a full and complete written description teaching one of ordinary skill in the art how to make and to use Appellant's invention, as defined by Claim 47. Accordingly, withdrawal of this rejection is respectfully urged.

**VIII. Rejection Of Claims 44-58 Under First Paragraph Of 37 C.F.R. §112 – Written Description**

In paragraph 23 of Paper No. 41, claims 44 through 55 are further rejected under the *first* paragraph of 35 U.S.C. §112 as allegedly containing subject matter which was not described in the specification. In support of this rejection, the Examiner asserted that:

“[t]he claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art ... that the inventor(s) at the time the application was filed, had possession of the claimed invention. Claims 44, 48, 55 and 56 are insufficiently disclosed in the specification as originally filed.”<sup>2</sup>

This rationale is inadequate to support a rejection under the written description requirement of the first paragraph of 35 U.S.C. §112. Appellant therefore respectfully urges the Board to refuse to sustain this rejection.

**First**, the reasoning given by the Examiner in support of this rejection is rather convoluted, and appears to turn upon the language of claim 5, but the interpretation of that language cited by the Examiner is a paraphrase of claim 5, and that paraphrase is incomplete. Moreover, that paraphrase is not language which appears in claim 5. As demonstrated below, the use of a garbled version of a claim by the Examining staff is improper, and is inadequate to support a rejection under the written description requirement of the first paragraph of 35 U.S.C. §112.

**Second**, it is highly unorthodox to apply the language of claim 5 to support a rejection of

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<sup>2</sup> Paper No. 41, page 10.



claims 44, 48, 55 and 56 under the written description requirement of the first paragraph of 35 U.S.C. §112. Each claim necessarily differs. Moreover, claim 5 has not been rejected under the first paragraph of 35 U.S.C. §112.

**Third**, the Examining staff asserts that,

[c]laim 5 ... added a limitation of generating first and second control outputs for a period of time defined by ... [but] the specification does not provide an enabling disclosure for such limitation particularly in light of the fact that in each instance of receiving a lock key data signal, video is reproduced or received and displayed ... .”<sup>3</sup>

This rationale of the Examining staff is factually incorrect; not only has this issued already been addressed by the Board of Patent Appeals and Interferences, but neither claim 44, 48, 55 nor 56 use language such as “generating first and second control outputs for a period of time” or “in each instance of receiving a lock key data signal, video is reproduced or received and displayed.” Accordingly, there is no basis for maintaining this rejection. It withdrawal is respectfully requested.

**Fourth**, the Examining staff writes that,

“there is no support in the specification as originally filed for determining a match of first and second lock key data signals ... .”

Perhaps the Examining staff should consider Appellant’s Figure 1, steps 15 or 16, among other teachings of Appellant’s original specification. In view of this, there is no basis for maintaining this rejection. It withdrawal is respectfully requested.

**B. The Texts Of The Pending Claims Is Fully Supported By The Express Language Of Appellant’s Specification**

In response to Appellant’s explanation set forth in the Amendment filed on the 21<sup>st</sup> August 2006, the Examiner obliquely raised the issue of an absence of a written description by stating:

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<sup>3</sup> Paper No. 41, page 10.

The response fails to clearly provide an explanation of the support in the disclosure of the patent for each of the changes made to the claims. In the Remarks (page 34), the Appellant alleges “each of claims 1 through 8 lies in the disclosure of these claims themselves”. The Appellant fails to clearly identify which claims he is talking about.

The Appellant’s Remarks are correct however, because, under Pursuant to 37 CFR §1.173(c), each of patent claims 1 through 8 inclusive, as is explained in the following paragraphs, provides its own support for the specific amendments made to those claims in this reissue application.

Not all amendments to a claim constitute “changes made to the claims”<sup>4</sup> under 37 CFR §1.173(c).

The attention of the Examiner is therefore also invited to consider the express language of 37 CFR §1.173(c), which reads that,

“[W]henver there is an **amendment** to the claims pursuant to paragraph (b) ..., there must also be supplied an explanation of the support in the disclosure of the patent for the **changes** made to the claims.”<sup>5</sup>

Consider that 37 CFR §1.173(c) does not equate the noun *amendment* to the noun *changes*. In other words, the express language of 37 CFR §1.173(c) does not declare the noun *amendment* to be a synonym for the noun *change*. The attention of the Examiner is therefore, respectfully invited to note that no constituent element was added to claims 1 through 8 and no constituent element was deleted from any of claims 1 through 8. Moreover, no new matter was added to any of the patent claims. Consequently, no **changes** have been made to any of claims 1 through 8. The attention of the Examiner is also invited to note that claims 1 through 8 constitute an integral part of “the disclosure of the **patent**.”<sup>6</sup> Moreover, corrections of articles, conjugations,

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<sup>4</sup> 37 CFR §1.173(c).

<sup>5</sup> 37 CFR §1.173(c).

<sup>6</sup> 37 CFR §1.173(c).

participles, prepositions, punctuation and tenses are corrections that are internal to the structure of the claim itself, and support for such corrections is given by the text of the claim itself.

Appellant notes that Paper No. 20070116 fails to identify any **change** to any claim for which Appellant has not supplied **an explanation** of the support in the disclosure of the **patent**.

The **explanation** of the support in the disclosure of the patent for the amendment made to the claims was given in Appellant's Amendment of the 21<sup>st</sup> of August 2007. The claims referred to in the foregoing excerpt from Appellant's Remarks pertain to the changes to claims 4, 5, 6 and 44 made via the Amendment of the 21<sup>st</sup> of August 2007.

In the remarks section III-B, the Appellant alleges that claims 1-59 have been pending since the close of prosecution on the 9<sup>th</sup> of July 2002 and no other amendments have been made; according to the Appellant, the original application is not an amendment under 37 CFR 1.121(b)(2)(C)(iii) or 1.173(c) and thus, the Appellant is not required to provide an explanation of support. This is contradictory to the statements of the Appellant who states that the claims are amended and it is not a proper interpretation of the rule since in a reissue application, any change to the patented claims, represents an amendment to the application and requires an explanation.

This statement is improper and legally flawed under the Code of Federal Regulations.

**First**, the Examiner's statement that "in a reissue application, any change to the patented claims, represents an amendment to the application and requires an explanation" has erroneously confused the requirements of 37 CFR §1.173(c); the Examiner's statement also ignores the distinctions between 37 CFR §1.121(b)(2)(C)(iii) – **Manner of making amendments in applications**, and 37 CFR §1.173(c) – **Reissue specification, drawings, and amendments**. In particular, 37 CFR §1.121(a) expressly states that "[a]mendments in applications, **other than reissue applications** ... ." 37 CFR §1.173(c), rather than 37 CFR §1.121(b)(2)(C)(iii), regulates changes to the claims pending in a reissue application. As noted in the foregoing paragraphs, under the express language of 37 CFR §1.173(c), the noun *amendment* is not a synonym for the noun *change*.

**Second**, the Examiner's statement that "in a reissue application, any change to the patented

claims, represents an amendment to the application and requires an explanation” is incorrect and is an ill considered paraphrase of the actual language of 37 CFR §1.173(c), which reads:

“[W]hen there is an **amendment** to the claims pursuant to paragraph (b) ..., there must also be supplied an explanation of the support in the disclosure of the patent for the **changes** made to the claims.”<sup>7</sup>

37 CFR §1.173(c) does not purport to equate the noun *amendment* to the noun *changes*. In short, and contrary to the assertions of the Examiner, the express language of 37 CFR §1.173(c) does not declare that every *amendment* of a claim is also a *change* made to that claim. Moreover, Appellant respectfully notes that Paper No. 20070116 has not identified any *change* in any of the claims. Withdrawal of this objection is therefore respectfully urged.

**Third**, the Examiner’s statement “in a reissue application, any change to the patented claims, represents an amendment to the application and requires an explanation” has erroneously confused the text of 37 CFR §1.173(a) – **Contents of a reissue application**, with 37 CFR §1.173(b) – **Making amendments in a reissue application**, and 37 CFR §1.173(c) – **Status of claims and support for claim changes**. Neither 37 CFR §1.173(b) nor 37 CFR §1.173(c) govern the “contents of a reissue application.”

Paper No. 20070116 additionally states that,

Appellant’s assertion that on page 34 of the response filed 11/6/02, there is provided support for amendments to claim 1 is not persuasive and does not provide any showing of support for the amendments regarding changes of plural to singular signals, or to the addition of the language “do not” regarding the matching of code sequences.

The reason why Paper No 20070116 makes this statement is not explained in Paper No. 20070116. Claim 1 was not amended in Appellant’s Amendment of the 21<sup>st</sup> of August 2007.

Paper No. 20070116 states that:

Appellant’s assertion that the support for the changes to

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<sup>7</sup> 37 CFR §1.173(c).

claims 4, 5, and 6 lies in the original text of patented claims 4, 5, and 6 is not persuasive since each of the patented claims simply refers to the use of a “video tape recorder . . . for reproducing a video tape”.

This statement, taken from among the Examiner’s comments in Paper No. 20070116 ignores the text of patent claims 4, 5 and 6, each of which when read together with patent claims 1 through 3, 7 and 8, collectively teach, *inter alia*, control of an on-screen display system able to visually display, among other images, “error message”<sup>8</sup> by the expedient of utilizing Appellant’s “on-screen display function.”<sup>9</sup> An “error message” is intrinsically an “image” as stated in the amendments of claims 4, 5 and 6. In some implementations of the principles of Appellant’s inventions, a “video tape recorder ... for reproducing a video tape” may, as is observed by the Examiner, used to store a “video signal”<sup>10</sup> to produce other images including a “first video signal” and a “second video signal.”<sup>11</sup> Accordingly, support for the changes to claims 4, 5, and 6 lies in the original text of patent claims, as observed by Appellant in the Amendment of the 21<sup>st</sup> of August 2006 and the Examiner’s comments in Paper No. 20070116.

Paper No. 20070116 continues by stating that,

The Appellant’s assertion that the changes presented by all of the claims 9-59 lie in Figures 1, 3A and 3B in combination with Figures 1 and 4 and col. 1, lines 16-17, col. 2, lines 20-34 and col. 3, line 51 through col. 6, line 2 is not persuasive and such indication of practically the entire specification including the drawings, does not meet the requirement of providing an explanation of the support in the disclosure as required by 37 CFR 1.173. Thus, the Appellant continues to fail provide explanation of support for the claim changes.

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<sup>8</sup> Claim 7, line 20.

<sup>9</sup> Claim 7, line 20.

<sup>10</sup> Claim 3, line 3.

<sup>11</sup> Claim 2, lines 10 and 11.

The reference to *all of the claims 9-59* in the foregoing excerpt from the Examiner's comments on page 2 of Paper No. 20070116 is untimely because only one of the claims 9 through 59 were amended in Appellant's Amendment of the 21<sup>st</sup> of August 2006. Moreover, this statement contains no relation to the amendments made in Appellant's of the 21<sup>st</sup> of August 2006, because only claims 4 and 6 were amended via that Amendment. Furthermore, in support of the amendments made via Appellant's Amendment of the 21<sup>st</sup> of August 2006, that Amendment expressly complied with 37 CFR §1.173(c) by explaining that:

“Claims 4, 5 and 6 are amended to delete ‘tape’ and thereby alter its preamble to more broadly read ‘video recorder’, and to substitute the generic phrase ‘storage medium’ for ‘tape’. Support for these changes lies in the original text of patented claims 4, 5 and 6.”

Consequently, the assertion that “the Appellant continues to fail [*sic*, to] provide explanation of support for the claim changes” is unwarranted.

Paper No. 20070116 also asserts that:

For example, in claims 9 and 15, it is not seen where in the specification there is support for the language “controlling production of video images corresponding to said video components through generation of a control output for a period of time defined by a first input of lock key data followed by a secret code and a second input of said lock key data followed by said secret code.” Appellant is required to show by column and line number in the original specification where there is support for such feature.

This assertion is unfounded because no amendments of claims 9 through 15 were made in the Amendment of the 21<sup>st</sup> of August 2006. Secondly, the Examiner's assertion that “Appellant is required to show by column and line number in the original specification where there is support for such feature” is inaccurate; the original proposal for citation of column and line number was deleted from an earlier draft of the proposed amendments of 37 CFR §1.173. Currently, there is no requirement imposed under 37 CFR §1.173(c) “for citation of column and line number.”

Paper No. 20070116 further states that:

For example, in claim 20, it is not seen where in the

specification there is support for a “process for operating a video system comprising making a subjective evaluation of content portrayed by a first video signal to be transmitted for reception by a video display apparatus . . . during a system power standby mode of operation selectively generating a code in dependence upon said evaluation and responding to said code by barring transmission of said first video signal to said video display apparatus.”

This statement is untimely because no amendment of claim 20 was made in Appellant’s Amendment of the 21<sup>st</sup> of August 2006. The process defined by the Examiner’s comment that “a ‘process for operating a video system comprising making a subjective evaluation of content portrayed by a first video signal to be transmitted for reception by a video display apparatus ... during a system power standby mode of operation selectively generating a code in dependence upon said evaluation and responding to said code by barring transmission of said first video signal to said video display apparatus’” conforms to the original process defined by claim 20 in the above-captioned application as originally filed. No amendment has been identified by Paper No. 20070116.

Paper No. 20070116 continues by asserting that,

Appellant is required to show where in the specification, by column and line number, where this process is specifically supported.

This assertion is factually inaccurate because the Examiner’s assertion that “Appellant is required to show by column and line number in the original specification where there is support for such feature” is in error. The original proposal for citation of column and line number to support a change to a pending claim of a reissue claim made via an Amendment was deleted from a very early draft of the proposed amendments of 37 CFR §1.173, in recognition of the fact support for the language of any passage of a claim is based upon the teachings of the patent, and that consequently, the patent must be considered in its entirety. Consequently, a thorough reading of 37 CFR §1.173(c) demonstrates that this section imposes no requirement “for citation of column and line number” for any purpose. It appears that the Examiner has erroneously confused the **markings** requirement imposed by 37 CFR §1.173(d)(1) and (2) and the **support for claim**

**changes** imposed by 37 CFR §1.173(c). The **markings** requirement imposed by 37 CFR §1.173(d)(1) and (2) contemplates reference to column and line numbers. In contradistinction, the **support for claim changes** imposed by 37 CFR §1.173(c) requires not reference to column and line numbers, but “an **explanation** of the support in the disclosure of the patent for the changes made to the claims.”

#### **IX. Rejection Of Claims 44-58 Under Second Paragraph Of 37 C.F.R. §112**

In paragraph 24 of Paper No. 41, claims 44 through 58 are also rejected under the *second* paragraph of 35 U.S.C. §112 as being allegedly indefinite. Appellant addresses each instance of indefiniteness alleged in the following paragraphs.

#### **Claim 44**

Paper No. 41 states that,

“The language ‘locking said video signal and preventing application of said video signal to enable said mixing in dependence upon said determination’ is indefinite and fails to clearly and distinctly set forth the invention. What is the difference between ‘locking said video signal’ and ‘preventing application of said video signal’? The language ‘preventing application of said video signal to enable said mixing’ is contradictory since ‘preventing application of said video’ and the ‘enabl(ing) said mixing’ appear contradictory.”<sup>12</sup>

It is unclear why the Examiner has divided the ultimate paragraph into two clauses, and has not read the ultimate paragraph of claim 44 as it is written, in a single clause; when read in its entirety, claim 44 is accurate and definite. The Examiner has however, dissected the ultimate paragraphs of claim 44 and then questioned,

“[w]hat is the difference between *locking said video signal* and *preventing application of said video signal to enable said mixing*?”<sup>13</sup>

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<sup>12</sup> Paper No. 41, pages 11 and 12.

<sup>13</sup> Paper No. 41, pages 11 and 12.



As written, claim 44 defines a process comprised of, among other features,

“mixing said video signal and said first character signal; ... mixing said video signal and said second character signal ...[and] locking said video signal and preventing application of said video signal to enable said mixing ... .”

The short answer to the Examiner’s question is that *locking said video signal* is one part of one possible implementation of Appellant’s process and *preventing application of said video signal to enable said mixing* is another part. A more complete answer dwells upon the fact that a “mixer” is not a node; timing is everything in video signal processing because the basic property of a mixer ‘is that its output is not directly proportional to its input, but to the product of its inputs; when signals of different frequencies are applied to such a device, the output contains not only the original frequencies but also frequencies equal to the sum and difference of the original frequencies.’”<sup>14</sup> In a general definition, a “mixer” is a circuit “in which two or more signals are **combined**.”<sup>15</sup> In video circuits, a “video mixer” is a circuit that “allows video images to be combined and creates sophisticated translations between scenes.”<sup>16</sup> With most signals applied to a mixer, the phases and the synchronization of the signals applied to the mixer are important. With a video mixer, in the NTSC system used in the United States and in Japan, there are thirty frames per second, and thus sixty fields per second, while in extended definition (EDTV) and in high definition (HDTV) there are several hundred lines per frame. The time base of the video signal determines when each line, each field, and each frame begins. A clear, steady picture, devoid of jumpy images, flagging or waving verticals, requires an accurate, unchanging time base because if the lines start early or late, the visual video image will shift or waver in various ways; the wiggles in the video image are time-based errors. Two distinct video signals obtained from different sources are unlikely to be synchronized. When combining two or more video signals for

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<sup>14</sup> Bartleby.com, *The Columbia Encyclopedia*, 6<sup>th</sup> Edition, 2001-05.

<sup>15</sup> Bartleby.com, *The Columbia Encyclopedia*, 6<sup>th</sup> Edition, 2001-05.

<sup>16</sup> focusinfo.com, *Mixing Video Sources: Digital Video – Focus Enhancements*, 4 October 2005.

example, one signal can not start at line 55 while the second signal subsequently begins at line 1; the image will be unviewable. Moreover, with HDTV, absent precise synchronization, and with pixel addressed flat screen displays such as thin-film-transistor (TFT) or plasma display screens, because the video signals are binary (*i.e.*, in the vernacular, “digital”) signals, the visual display driven by the combined video signals will be illegible. A mixer assures time-base corrections and frame synchronization, typically with sufficient memory to store part of the video pictures. One technique of mixing uses the vertical and horizontal synchronization signals derived from one video signal to control the combination of two signals, such as a video signal and an on-screen character generator. Devices such as that disclosed by Rew ‘085 however, deliberately avoid combining video signals, and have no need of a mixer because they experience no problems of time-base correction or of line or frame synchronization.

Although the rationale given in Paper No. 41 for this rejection is unclear, Appellant has amended claim 44 to change the paragraph “locking said video signal and preventing application of said video signal to enable said mixing in dependence upon said determination” so as to read --locking said video signal by preventing application of said video signal to enable said mixing in dependence upon said determination – in view of the question raised by the Examining staff.

#### **Claim 47**

Paper No. 41 asserts that claim in 47,

“the language ‘locking said audio signal and releasing said muted video signal in dependence upon’ the determination of whether a second lock key data signal is identical to a first lock day data signal is not clear since it is not understood why the audio would be locked and the video would be unlocked”.<sup>17</sup>

It is unclear whether the Examiner has considered that as disclosed in Figure 2 of Appellant’s original specification, Appellant’s invention may be practiced with separate audio processing circuit stage 104 and video processor circuit stage 103; or that these stages 103, 104 may, in one

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<sup>17</sup> Paper No. 41, page 11 and 12.

implementation of Appellant's invention, practiced with different video mute circuit unit 107 and audio mute circuit unit 108; or that a video mute control signal is applied via lead 9 and an audio mute control signal may be applied via a different lead 10. A question of indefiniteness may not be predicated upon an artificial dissection of the language of the claim, because the claim must be read in its entirety. Clarification is subsequent Office correspondence is respectfully requested in order that Appellant will be able to fairly respond. Absent clarification, it is sufficient to note that audio processing circuit stage 104 and video processor circuit stage 103, or video mute circuit unit 107 and audio mute circuit unit 108, or a video mute control signal applied via lead 9 and an audio mute control signal applied via a different lead 10 need not be simultaneously in identical states; consequently, there is no indefiniteness present in claim 47, and there is no basis for maintaining this rejection.

**Claims 50-52 And 58**

Paper No. 41 stated that,

“the determination of whether the second lock key data is identical to a reference and the subsequent changing of the locking/unlocking state in dependence thereon is not clear since the ‘reference’ is undefined and not specified in the specification”.<sup>18</sup>

It is unclear whether the Examiner is arguing for a proposition that the express language of each claim be found *verbatim* in the specification. Not only is there is no support for this proposition in either the statute or the Code of Federal Regulations, but the second paragraph of 35 U.S.C. §112 does not require that each and every claim contain only those nouns found in the specification.

Although this rejection is couched in terms of claims 44 through 58 “being indefinite” and as “failing to particularly point out and distinctly claiming the subject matter which Appellant

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<sup>18</sup> Paper No. 41, page 12.

regards as *the* invention,”<sup>19</sup> the rationale given by Paper No. 41 is not written in these terms, but is rather written in terms questioning the breath and scope and of claims 44 through 58. The term “reference” is self-defining, and is used in parallel with “ the second lock key data” and “identical”; the relationship between “the second lock key data” and “reference” is well defined, precise and inescapable in its meaning and clarity in this passage; any additional verbiage in this claim directed to the “reference” would concomitantly limit the scope of coverage provided by claims 50 through 52 and 58.

Moreover, in presenting this argument in support of an indefiniteness of claims 50 through 52 and 58 the Examiner is arguing that the scope of Appellant’s claims must each conform completely and exactly to the embodiments disclosed in the specification, without regard to the fact that under the statute, the specification and claims serve distinctly diverse offices. Under the second paragraph of 35 U.S.C. §112, no restriction is placed upon the scope of the Appellant’s claims; the sole restriction placed upon the claims is that the claims particularly point out and distinctly claim:

“the subject matter which *the Appellant* regards as his invention”.<sup>20</sup>

It appears that this rejection is premised upon the Examiner’s belief that the language of each claim must be identical to the other claims, that no generic term be used to describe a species detailed in the specification, and that each passage of a claim have antecedent basis in the language of the specification; this is not U.S. practice and Paper No. 41 cites no authority for this proposition.<sup>21</sup>

In summary, these rejections of claim 44 through 58 under the second paragraph of 35 U.S.C. §112 raise no question about whether the Appellant here has particularly pointed out and

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<sup>19</sup> Second paragraph of 35 U.S.C. §112.

<sup>20</sup> Second paragraph of 35 U.S.C. §112.

<sup>21</sup> The Examiner’s attention is invited to note that under the second paragraph of 35 U.S.C. §112, Congress has bestowed upon solely *the Appellant*, and not upon the Commissioner or upon the Examiner, the prerogative of determining the “the subject matter *which he regards* as his invention.”

distinctly claimed the subject matter which the Appellant regards as his invention; whether each claim is written to use only nouns printed in some part of the specification is immaterial to questions under the second paragraph of 35 U.S.C. §112. Once the specification satisfies the criteria of the first paragraph of §112, the breath of the claims is left under 35 U.S.C. §102 and §103, to the state of the art as that art existed at the time of Appellant's invention. Here however, Paper No. 41 has questioned the definiteness of claims 44 through 58 on grounds that the language of these claims is not identical to the specification and that the language of claims 44 through 58 differs from the language of the other pending claims; this observation does not however, raise a question of whether claims 44 through 58 are "claims particularly pointing out and distinctly claiming the subject matter which *the Appellant* regards as his invention".<sup>22</sup> Consequently, there is no basis in the record for continuing this rejection. Its withdrawal is respectfully requested.

**Rejection of Claims 20, 44, 45, 47-51 and 54-58 Under 35 U.S.C. §251**

In paragraph 29 of Paper No. 20070116, claims 20, 44, 45, 47-51 and 54-58 are rejected under 35 U.S.C. §251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based.

The Examiner cited the following: *Pannu v. Storz Instruments Inc.*, 258 F.3d 1366, 59 USPQ2d 1597 (Fed. Cir. 2001); *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984).

In support of the rejection, the Examiner has previously asserted that;

"A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to claim subject matter that Appellant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within

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<sup>22</sup> Second paragraph of 35 U.S.C. §112.

the meaning of 35 U.S.C. §251, and the broader scope of claim subject matter surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.”

### **Reissue Applications**

- G. Claim 20 is rejected under 35 U.S.C. §251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based.**

Without giving consideration to the extensive explanation given in Appellant’s response to Paper No. 20060207, the Examiner summarily refers to the rejection to the previous Office Action, paragraphs 42-51, where the Examiner contends that:

Claim 20 is a process claim and therefore must relate in scope only to like method/process claims of the patent, which claims are claims 1, 7 and 8 of the patent. Claims 7 and 8 of the patent are directed to methods for locking/unlocking a display screen or VTR, while patent claim 1 is directed to a method of operating a video system.

The first step requires the examiner to review the claim for the presence of broadening, as compared with the scope of the claims of the patent to be reissued. A reissue claim is broadened where some limitation of the patent claims is no longer required in the reissue claim. That is, a claim of a reissue application enlarges the scope of the claims of the patent if it broader in at least one respect, even though it may be narrower in other respect. In the instant case, claim 20 is broadened since at least one limitation, such as **displaying a lock function setting state . . . and sequentially storing and displaying a secret code of a user**, is no longer required.

The second step requires the examiner to determine whether the broadening aspects of the claim relate to subject matter that Appellant previously surrendered during the prosecution of the original application. There are two sub-steps involved with this step. Thus, it must first be determined whether there was any surrender of subject matter in the prosecution of the original patent. The reliance by Appellant on a claim limitation to define the original patent claims over the prior art can be made by way of presentation of new/amended claims or an argument/statement by

the Appellant that a limitation defines over the art. The following arguments by the Appellant were presented in the prosecution history to overcome a rejection over the prior art.

The parent application, 07/398,927, set forth a single claim drawn to a locking method for a system with OSD. In response to an Office Action rejecting claim 1 over prior art, the Appellant responded with arguments "in contradistinction, Appellant's process includes steps such as (a) **displaying a lock function setting state and sequentially storing and displaying a secret code of a user**", (b) **comparing the secret code with a stored code and displaying an error message**, and (c) **initializing the stored code with the secret code displayed**. (See Response filed 5/24/90, page 4). A continuing application 07/681,843, with additional method claim 2 having limitations substantially similar to those of claim 1 as well as apparatus claims 3-4 were added. In filing the preliminary amendment, the Appellant again repeated the arguments set forth above with respect to the prior art (See Response filed 9/21/90). In Appellant's response filed 2/3/92, the Appellant argues the claims over the prior art since the prior art fails to teach or suggest **checking for an input from a lock key during a power stand-by state and remaining in the power standby state until such time as an Input from the lock key is detected** (mail date of response 1/27/92, page 9). In the same response, the Appellant argues for distinction over the prior art since the prior art fails to teach or suggest **checking to determine If the system is in a lock mode and storing an input secret code as a lock code and muting the video and audio, if the system is not already set in the lock mode** (mail date of response 1/27/92, page 10). In a response filed 8/29/92, the Appellant again argued that the prior art failed to teach or suggest **checking for an input from a lock key during a power stand-by state and remain in the power standby state until such time as an Input from the lock key is detected** (page 6). In the same response, the Appellant again argues for distinction over the prior art since the prior art fails to teach or suggest **checking to determine if the system is in a lock mode and storing an input secret code as a lock code and muting the video and audio, if the system is not already set in the lock mode** (page 7). The Appellant further indicates that the prior art does not disclose **the sequential displaying and storing**

**of the characters of the input secret code** (page 7). The Board of Appeals made a ruling that claim 8 of the application 08/024,495 (which became claim 7 of the patent) distinguished over the prior art combination since it failed to disclose (1) “checking for a key data signal input from said keyboard or remote control during a system power standby mode of operation”, (2) “displaying prompts . . . storing and displaying, on said screen, a secret code input by a user in response to said prompts”, and (3) storing the secret code as a lock code, clearing said screen of said prompts . . . and locking the on-screen display when the determining step determines that the on-screen display system is not in said locked state.” Thus, the prosecution history shows that the Appellant relied on specific, stated and argued claim limitations to define over the prior art; thus, it is deemed that there was a surrender of subject matter.

The second substep determines whether any of the broadening of the reissue claims is in the area of the surrendered subject matter. In claim 20, the Appellant has omitted in their entirety all of the limitations, set forth above in paragraph #49, that the Appellant relied upon to define patentability in the prosecution history. Thus, it is determined that claim 20 is broadened in the area of surrendered subject matter.

The third step requires the analysis of the broadening and narrowing effected via the reissue claims and of the significance of the claim limitations added and deleted to determine whether the reissue claims should be barred as recapture. In claim 20, there is no narrowing of scope in any manner. The limitations presented, argued, or stated to make the claims patentable over the prior art generates the surrender of claimed subject matter and is therefore referred to as the surrender-generating limitation. If a claim is presented in a reissue application that omits in its entirety, the surrender-generating limitation, that claim impermissibly recaptures what was previously surrendered, and that claim is barred under 35 USC 251.

The fallacy in the Examiner’s logic resides in the Examiner’s failure to consider that under the doctrine of claim differentiation, patent claims 1, 7 and 8 necessarily differ in scope. Those differences have not been identified in the Examiner’s logic. Moreover, the Examiner has



neglected to identify any “surrender-generating limitation.”

Appellant raised three (3) issues under the first question, of whether Claim 20 was improperly rejected under 35 U.S.C. §251, and seven (7) separate issue under the second question, of whether there is evidence in the instant record that fairly justifies a rejection of claim 20 under the doctrine of reissue recapture. The Examiner has only superficially addressed the three issues raised by the first question (*i.e.*, issues I.A, I.B and I.C), and has only made a cursory, albeit incomplete presentation of *Pannu v. Storz Instruments*, 59 USPQ2d, 1600 (Fed. Cir. 2001) and *Hester Industries, Inc. v. Stein, Inc.*, 46 USPQ2d 1641 (Fed. Cir. 1998) to address the three of the first four (*i.e.*, issues II.D, II.F and II.G) of the seven issues raised by Appellant’s second question; the Examiner has not addressed the facts presented in Appellant’s argument and has implicitly conceded the third of the seven issued raised by Appellant’s second question (issue II.E). In addressing the fifth issue raised by Appellant’s second question, the Examiner seems to assert that 22<sup>nd</sup> of July 1997 Opinion of the Board in Appellant’s patent, created “lesser limitations”, even though the single patent claim 7 then before the Board was subsequently issued without amendment. The Examiner appears to properly concede the correctness of Appellant’s presentation on the last two issues raised by Appellant’s second question (*i.e.*, issues II.J and II.K), and has not made any argument traversing Appellant’s issues II.J and II. K.

**I. Claim 20 Was Improperly Rejected Under 35 U.S.C. §251.**

Independent claim 20 stands finally rejected under 35 U.S.C. §251 as being drawn to recaptured subject matter. This rejection is improper for the following reasons.

- D. 35 U.S.C. §251 Neither Invokes An Impermissible “Point-Of-Novelty” Test Of Patentability Nor Limits The Scope of Coverage Attainable With A Reissue Claim By Mandating That Each Reissue Claim Have As Included Limitations One Or More Of The Reasons Articulated By The Board Of Patent Appeals And Interferences For Refusing To Sustain A Final Anticipation Rejection Of A Patent Claim.**

In support of this rejection, the Examiner now asserts that:

“[t]he arguments and limitations presented then must at least now be relied upon

to define why the present claim 20 of related scope should be considered allowable over the same.” Examiner’s Answer, page 4.

The Examiner’s reliance upon the reasoning given by the Board of Patent Appeals & Interferences in refusing to sustain the anticipation rejections of patent claim 8, were previously addressed by Appellant in the remarks of Appellant’s amendment filed on the 21<sup>st</sup> of November 2001; the Examiner has now withdrawn the anticipation rejection of claim 20, but has raised the same issue under the guise of reissue recapture to support a rejection under 35 U.S.C. §251.

**First**, the Examiner’s reliance is misplaced and confuses the issue of reissue recapture, because the Examiner has, among other reasons, ignored both the express holdings and the rationale given by the Board for those holdings in the following numbered paragraphs:

- “19. After considering the contested limitations, we do not find a preponderance of evidence supporting a finding of anticipation under 35 U.S.C. §102(b) in view of Bonneau.”
- “27. In light of the above findings, the preponderance of evidence does not support a finding of anticipation under 35 U.S.C. §102(b) in view of Amano.”
- “13. Thus, we construe ‘checking ... during a system power standby mode close inside’ (claim 8) to mean running the key-checking function while the main system power is off. Bonneau discloses no equivalent requirement for starting the locking process from a system-power-off state. Thus, Bonneau does not anticipate the claimed invention.”
- “14. Bonneau displays two kinds of prompts for entry of a security code: a blank screen (8:22-24) and a blinking screen (7:50-53). Bonneau displays the blank screen during security-code entry so the code cannot be observed. Appellant, however, discloses acts of prompting for each digit of the code independently and of displaying each digit as it is entered. (Paper 1 at 8-11; Fig. 4.) Thus, Bonneau’s U.S. display step is not equivalent to the claimed display step.”
- “16. Bonneau does not, however, have a step equivalent to Appellant’s process of clearing the existing code or setting a new code each time. (Paper 1 at 12-13.) Moreover, since Bonneau does not display the code, it cannot clear the code from the display.”

- “22. Amano has nothing equivalent to Appellant’s claim limitation that the system power be off during the checking step. The system power is on during Amano’s code entry steps. (5:36-45; Fig. 3.)”
- “24. Amano is silent about whether the entered lock code is stored. Nothing in Amano suggests a step equivalent to Appellant’s step of storing a new code if the system is not locked.”

In short, the Board did not engage in an impermissible *point-of-novelty* determination of patentability; the Board considered patent claim 7 in its entirety. Consequently, the Examiner’s resurrection of this issue under a guise of recapture rejection under 35 U.S.C. §251, as opposed to the anticipation rejection to which Appellant’s amendment of the 21<sup>st</sup> of November 2001 was formally addressed, is misplaced.

As was earlier explained, the seminal judicial decision of *Pannu v. Storz Instrument, Inc.*, Fed. Cir. 00-1482, 7/25/2001 (decision) refers to U.S. Patent No. 4,436,855 (the Examiner’s attention is drawn to the fact that the decision of the Court is incorrect, and that the Pannu '855 is actually U.S. Patent No. 4,435,855) and Re32,525. All claims in the '855 patent defined the haptics as having “a continuous, substantially circular arc having a diameter greater than the diameter of the lens body,” while reissue claims 1 through 10 in the '525 reissue patent deleted this limitation. There were no other independent claims in the '855 Pannu patent; consequently, *all* claims contained the same limitation. In view of the amendments of all claims to add the “two flexible and supporting elements” *and* the accompanying arguments presented by Pannu during prosecution of the '855 patent, the Court properly held that an attempt to obtain a broader definition of the haptics constituted a recapture of subject matter surrendered during the prosecution of the '855 patent.

A similar result may be found in *Hester Industries Inc. v. Stern Inc.*, 64 USPQ2d 1641 (Fed. Cir. 1998) where all of the original claims defined cooking “solely with steam” supplied by “two sources of steam”, which limitations were deleted from the reissue patent. There, the Court properly held that the reissue patent was invalid.

In the instant application however, the Examiner has focused upon Appellant’s “system

power stand-by state” as defined by issued independent method claims 7 and 8, and has asserted that the absence of this limitation from the rejected claims constitutes impermissible recapture. The Examiner has ignored however, the fact that independent method claim 1 defines not the “system power stand-by state” of patent claim 7, but instead defines simply a “stand-by mode of operation” while independent patent apparatus claim 2 defines a “stand-by mode of operation.”

The rejected claim 20 also defines a “stand-by mode of operation” as opposed to the “system power stand-by state” of patent claim 7 argued by the Examiner. In view of the fact that patent claims 1 through 6 and 8 were not addressed by the Board of Patent Appeals and Interferences and were not the subject matter of the arguments presented by Appellant for patentability of patent claim 7, there is no basis for arguing recapture. Neither *Pannu* nor *Hester Industries* dictates a recapture rejection of Appellant’s claim 20 because Appellant’s rejected claim 20 is directed to different subject matter than Appellant’s patent claim 7, while the *Pannu* and *Hester Industries* Appellants presented as reissue claims, the patent claims amended to delete the very limitations presented during prosecution to overcome the prior art. In essence, both the *Pannu* and *Hester Industries* reissue Appellants presented reissue claims that were directed to the same subject matter as their patent claims, with the reissue claims differing from the patent claims principally by the omission of specific limitations that had served to distinguish their patent claims from the prior art. Neither the *Pannu* nor *Hester Industries* panels of the United States Court of Appeals for the Federal Circuit either held, nor even addressed the issue of whether those reissue Appellants were entitled to present reissue claims directed to inventions that were substantively, structurally or operationally different from the inventions defined by their patent claims.

**Second**, the decision of the Board was limited to patent claim 7; rejected claim 20 differs substantially in content, subject matter and definition of Appellant’s inventions. As explained in Appellant’s remarks filed on the 21<sup>st</sup> of November 2001, the rationale given by the Board for its several holdings in its decision of the 22<sup>nd</sup> of July 1997, does not create some sort of estoppel that forbids Appellant from further presenting any claim that does not contain a verbatim recitation

of all of the limitations of patent claim 8. Evidence of this may be gleaned from the fact that issued patent claims 1-7 were not before the Board, but were in fact allowed by the Examiner prior to the decision of the Board, even though these claims had earlier been rejected as rendered obvious by the same Amano and Bonneau references. Patent claims 1 through 6 and 8 differ in their coverage of different implementations and embodiments of Appellant's invention, differ in the language to define the structural, features and process steps of those inventions, and differ in their definitions of the circuits, or process steps, required to practice the corresponding invention. Claim 20 similarly differs from patent claim 8. The fact that the Board, in its thoroughness while reviewing the final rejection of patent claim 8 gave several reasons for refusing to sustain the final rejection, does not now mandate that reissue process claim 20 recite the same patentably distinguishing features of patent claim 8. It is respectfully suggested therefore, that claim 20 is not similar to process patent claim 8, and that the Board did not have the opportunity when considering patent claim 8 of also considering reissue claim 20.

Moreover, it is the decision of the Board, rather than the reasoning given by the Board in support of its decision, that constitutes the jural fact. Often, the reasoning is simply *obiter dictum*, which itself does not carry legal effect. The Examiner's reliance upon the reasoning given by the Board for its decision is consequently misplaced, and should be withdrawn.

**E. 35 U.S.C. §251 Does Not Require A Reissue Appellant "To Only Correct Errors In The Parent Patent Method Claims."**

The Examiner has newly asserted that "any method claim is required in reissue proceedings under 35 U.S.C. §251 to only correct errors in the parent patent method claims." Examiner's Answer, page 4. The Examiner cites *Pannu v. Storz Instruments, Inc.*, 59 USPQ2d at (1600 Fed. Cir. 201) as supporting a reissue Appellant's presentation of method claims.

**Third**, The Examiner's *idee fixe* that the feature of "checking for a key-data input signal from said keyboard or remote control during a system power standby mode" (Examiner's Answer, page 4) referred to by the Board in paragraph 13 of its 1997 Decision and found in patent claim 7, ignores Appellant's patent claim 1's definition of "when ... is in said standby mode of operation,

*receiving* a lock function code ... .” Even assuming *arguendo* that the reasoning given by the Board in its 1997 Decision creates a reissue estoppel, reissue claim 20 is, in the particular clause of the Examiner’s *idee fixe*, more comparable to patent claim 1 than to patent claim 7. There is a telling incongruity in the Examiner’s insistence that reissue claim 20 must include patent claim 7’s step of “*checking* ... during a system power standby mode”, while not insisting that reissue claim 20 also include patent claim 1’s step of “*receiving*” during a “standby mode of operation.” The incongruity is easily explained by reading patent claims 1 and 7 and reissue claim 20; this incongruity occurs because patent claims 1 and 7 and reissue claim 20 are each directed to different subject matter. Unlike *Pannu* and *Hester Industries*, where the patent and reissue claims differed only in scope, here Appellant’s reissue claim 20 differ in substantive content, structural aspects and the inter-cooperation between their structural aspects. There is no basis to sustain this rejection provided by the Examiner’s attempt to assert a reissue claim 20 do during their respective standby modes of operation.

Moreover, and most significantly, and unlike the Appellant in *Pannu* and *Hester Industries*, Appellant here never argued non-obviousness before the Board of Appeals in the parent application. *See*, for paragraph 8 of the Board’s findings, where the Board wrote “Curiously, Appellant does not challenge the examiner’s rejection for obviousness in his brief.” The Board continued however, by finding that the Examiner simply had not met “the burden of establishing unpatentability by a preponderance of the evidence.” Absent challenge by Appellant then, there is no basis for the Examiner to now assert recapture. The rejections for recapture are unfounded on the record, and should not be sustained.

#### **Procedure for Determination of Recapture**

The Examiner’s attention is invited to the reasoning of the Court in the *Pannu* decision, where the Court explains that the application “of the recapture rule is a three step process. The first step is to determine whether and in what aspect the reissue claims are broader than the patent claims. The second step is to determine whether the broader aspects of the reissue claims relate to surrendered subject matter. Finally, the Court must determine whether the reissue claims were materially narrowed in other aspects to avoid the recapture rule. These three steps are set forth

in the *Manual of Patent Examining Procedure*, §1412.02 (8<sup>th</sup> ed.).

As explained in the *Manual*,

“If the limitation now being omitted or broadened in the present reissue was originally presented/argued/stated in the original application to make the claims allowable *over a rejection or objection* made in the original application, the omitted limitation relates to subject matter previously surrendered by Appellant, and impermissible recapture exists.” §1412.02

The Examiner has confused the arguments presented on behalf of patentability of what is now claim 8, with prosecution of what are now claims 1 through 7. Independent method claims 2 and 9 were presented in Appellant's Preliminary Amendment filed on 1 March 1993, together with independent apparatus claims 3 and 5 (now claims 2 and 4). The issues raised by the Examiner about *standby state* were raised by Appellant in an unanswered Petition under 37 C.F.R. §1.181 filed on 12 January 1994 and an unanswered renewed Petition under 37 C.F.R. §1.181 filed on 17 February 1994. It is disingenuous for the Examiner to now raise these issues, when the original Petitions remain unanswered by the Director.

Moreover, independent method claims 2 and 9, which are now patented method claims 1 and 8, were never amended and were never argued as being distinguishable over the art due to the presence of “during said power standby mode”. Similarly, independent apparatus claims 3 and 5 (now patented claims 2 and 4) were neither amended nor argued to either include or as distinguished over the art due to the presence of the limitation “during a system power standby state.” This limitation was present in originally drafted claim 8 filed on 10 May 1993, and was neither amended to avoid art or to otherwise obtain allowance of claim 8, simply because this limitation was never amended and it was the Board, rather than the Examiner, who allowed claim 8. Consequently, the first step applied in recapture rule, that is, identifying a limitation that “was originally presented/argued/stated in the original application to make the claims allowable over a rejection made in the original application”, is wholly absent here. MPEP §1412.02.

#### **Arguments Made During Prosecution**

Furthermore, Appellant has surrendered nothing during the prosecution of the parent

application. As explained in §1412.02,

“argument (without amendment to the claims) in the original application may be sufficient to establish recapture.”

Here, Appellant never argued the phrase “during the system power standby state” in conjunction with the allowance of independent apparatus claims 3 and 5 (now claims 2 and 4) simply because that limitation is not present in these apparatus claims. Moreover, Appellant never argued this limitation in conjunction with the allowance of independent method claims 2 and 9 (now claims 1 and 8), as is evident in the Remarks of Appellant's Amendment filed on 30 June 1994. It was the subsequent Office action, and the Advisory Action dated 8 July 1994 that allowed claims 2 through 7 and 9. With exception of one issue under the second paragraph of §112 pertain to claim 3, the Remarks in that Amendment were directed to patentability of claim 8, which was subsequently allowed by the Board. Appellant's unanswered Petitions of the 12 January 1994 and 17 February 1994 dealt with the procedure followed by the Examiner, and presented neither arguments nor amendments of subsequently allowed claims 2 through 7 and 9. The Examiner's attention is directed to pages 9-11 of Appellant's long unanswered Petition of 17 February 1994, where claims 2 through 7 and 9 were discussed. The word “standby” does not appear anywhere in these discussions. No amendments of these claims were made to add any limitation of “standby”. Similar arguments are set forth in pages 8-10 of Appellant's earlier filed, but also long unanswered Petition dated 12 January 1994. In view of the failure and refusal of the Group to timely respond to these Petitions, there is no basis for the Commissioner to now raise those issues. In short, there is neither surrender nor demonstration of the absence of the third step required by the *Pennu* decision, namely, a determination of whether the reissue claims are materially narrowed in other respects so as to avoid the recapture rule. In short, the rejection is incomplete and improper on both the amendments presented during the prosecution of the parent claims and the arguments presented for patentability of those claims.

#### **Relation Between Patented and Rejected Claims**

The Examiner has argued that claim 20 can only relate to patented claim 7, and method claims 44-58 may only be related to patented claims 7 and 8. The Examiner has no authority to



make this assertion, and there is no showing that these claims are not also related to patented apparatus claims 2 and 4.

The Examiner questions whether claim 20 should expressly state that Appellant's step of "making a subjective evaluation" is "being done during said system power standby mode" as established by claim 7. Claim 7 lacks Appellant step of "making a subjective evaluation". Consequently, claim 7 does not create any estoppel to Appellant's presentation of claims containing process steps that are not present in claim 7. By way of example, nothing in a doctrine of recapture presents Appellant from amending claim 7, by way of example, to include Appellant's step of "making a subjective evaluation". Consequently, there is nothing in the doctrine that prevents Appellant from presenting claim 20 with this process step.

The Examiner's attention is invited to the fact that claim 20 does define a step of "during said power standby mode of operation, selectively generating a code". Independent claim 1 defines a method in which "when the video cassette recorder is in said standby mode of operation", the recorder receives "a lack function code". Claim 2 defines a recorder having "a standby mode of operation wherein the video tape is not reproduced" while claim 4 defines a recorder having "a standby mode of operation wherein the video tape is not reproduced." Claim 7 alternatively defines a method of "checking" during "a system power standby mode of operation" for "a key-data input signal" while claim 8 defines "checking for an input signal, ... during a system power stand-by state." Nothing in the arguments presented during prosecution, or in limitation added to the claims during prosecution, suggest that Appellant is forbidden from broadly defining an alternative step of "during said system power standby mode of operation, selectively generating a code" as set forth in line 5 of claim 20, in combination with a newly presented step of "making a subjective evaluation", despite the fact that none of the pending claims expressly use this combination of language. Consequently, there is no basis for refusing allowance of claim 20 simply because Appellant does not expressly define step of making the evaluation during the system power standby mode, when neither the amendments to the claims presented during prosecution of the parent application, or the arguments presented in support of the allowance of those claims, state that the step of "evaluation" occurs "during the system power

standby mode of operation.” Withdrawal of this rejection of claim 20 is therefore required.

The Examiner questions whether the arguments presented in the Brief in Appellant’s parent application in support of patentability of claim 8, require that independent claims 44, 48, 55 and 56 expressly recite either a “standby” mode as defined by claim 1 or a “power standby” as defined by claim 7 and 8? The Examiner asserts that reference to apparatus claim 4 as a basis for this reissue process/method claims can not provide a basis for recapture here. Appellant agrees with the Examiner’s assertion. The fact that claims 44 through 58 might be related in various aspects to apparatus claim 4, rather than claim 8 which was ultimately allowed by the Board of Appeals is irrelevant to application of the doctrine of recapture. The Examiner’s question ignores the fact that patented claim 7, rather than patented claim 8, with the subject matter of the Brief, and that the arguments presented and supported the patentability of patented claim 7 have nothing to do with the patentability of either patented claims 1 through 6 or patented claim 8. The fact that the “standby” mode may have been argued as a point of patentable distinction of patented claim 7, has nothing to do with patentability of apparatus claims 2 and 4, neither of which define specific process steps as occurring during a standby mode of operation. Patented claims 1 through 6 and 8 were allowed prior to Appellant’s presentation of any arguments or remarks directed to the “standby” mode. Consequently, neither the amendments to patented claims 1 through 6 and 8 nor arguments presented in support of patentability of those claims creates a recapture bar to Appellant’s presentation now of reissue process claims that perform certain steps that are not limited to occurrence during a standby mode. This permissible breath of scope according to Appellant’s presentation of process claims conforms to the scope of the patented apparatus claims, which do not limit the operation of particular constituent elements to the occurrence of a standby mode. Withdrawal of this rejection is therefore required.

In summary, the foregoing deficiencies in application of the recapture rule, together with the fact that Appellant made no amendment of either patented method claims 1 and 7 or patented apparatus claims 2 and 4 to add any “power standby” limitation, and made no argument to justify patentability of these claims over the applied art, establishes that recapture does not exist. The Examiner is further reminded that claim 7 was the subject of the appeal, and that was the Board,

rather than the Examiner who allowed claim 7. Claim 7 however, differs in scope, breadth, and content from these rejected claims, as well as from claims 1, 2, 4 and 8. There is no basis therefore, in restricting the consideration of recapture to only patented claims 7 and 8.

## **II. There Is No Evidence In The Instant Record That Fairly Justifies A Rejection Of Claim 20 Under The Doctrine Of Reissue Recapture**

### **K. The Examiner's Assertion That *Not All Features Of The Original Claims Were So Argued, Just That Listed Below As It Relates To The Method Claims Of The Same Reasonable Scope Is A Non Sequitur That Does Not Support The Examiner's Recapture* Rejection Of Claim 20 Under 35 U.S.C. §251.**

On page 5 of the Examiner's Answer, paragraph 10, the Examiner argues that,

“[n]ot all features of the original claims were so argued, just that listed below as it relates to the method claims of the same reasonable scope ... [t]he present rejected claims do not include ‘*checking for a key-data input signal from said keyboard or remote control during a system power standby mode*’ as is required by arguments introduced by Appellant and further supported by the Opinion of the Board of Appeals (mailed 22<sup>nd</sup> of July 1997, page 6, lines 10-14 of the Opinion.” Examiner's Answer, pages 5.

The Examiner has distorted the prosecution history of Appellant's patent; in its *Findings Of Fact And Conclusions Of Law* issued on the 22<sup>nd</sup> of July 1997, the Board carefully examined seven (7) distinct limitations of patent claim 7 in paragraphs 10 through 18, and six (6) distinct limitations of patent claim 7 and last two paragraphs on page 11 and the first paragraph on page 12 of Appellant's amendment filed on the 1<sup>st</sup> of December 1998. The Board only addressed limitations raised by the Appellant in the Briefs. The distortion is explained in greater detail in conjunction with the following issue; but it suffices to recognize that Appellant argued more than the single feature of patent claim 7 which the Examiner now asserts is the *sine qua non* of the invention defined by reissue claim 20. Additionally, the Examiner has improperly miscast Appellant's claim 20 as being of comparable scope to patent claim 7; patent claim 7 defines a process of *checking for key-data input* during a system standby mode, while reissue process claim 20 is

directed to a different invention, with a process step of *generating a code* during a system power standby mode – claims 7 and 20 are directed to different inventions, a fact that seems to be lost upon the Examiner. The *non sequitur*<sup>23</sup> is best demonstrated by the fact that if the feature of claim 1 now argued by the Examiner were absent from claim 7, claim 7 would still probably be allowable over Bonneau because the Board found that “a preponderance of evidence” did not support the rejection. In short, the Board had already noted that “Bonneau’s display step is not equivalent to the claimed display step. That is, the Board had more than one finding of fact to support its *Conclusion of Law*.

**L. 35 U.S.C. §251 And The Doctrine Of Reissue Recapture Do Not Either Seize Upon Any Explanation Given By An Appellant In Support Of The Traversal Of An Art Rejection Or Use The Fact That Appellant Mentioned The Presence Of One Or More Aspects Of A Rejected Claim When Traversing An Art Rejection, As Creating An Insurmountable Bar To Allowance Of A Reissued Claim Which Fails To Recite The Identical Aspect Mentioned In The Appellant’s Traversal.**

In the Examiner’s Answer (paragraph 11), page 4), the Examiner asserts that:

“The few critical elements under *Hester* argued by Appellant as essential to the method claim is the prosecution history : ‘*checking for a key-data input signal from said keyboard or remote control during a system power standby mode*’ as deemed critical by arguments first introduced by Appellant on page 8, lines 4-8 of their Brief, but restricted to only the above language in the Opinion of the Board of Appeals mailed 22 July 1997 (page 6). Examiner’s Answer, page 6.

Although the Examiner concedes that the condition precedent for the creation of reissue recapture, mainly amendment of a claim in order to overcome a prior art rejection, did not occur during prosecution of the parent application (because Appellant’s *checking* process step was present in patent claim 7 when that claim was first written in the amendment of the 10<sup>th</sup> of May 1993, the

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<sup>23</sup> Technically, this argument in the Examiner’s Answer is referred to in logic as an *ignoratio elenchi*, that is, a logical fallacy which consists in apparently refuting an opponent while actually disproving some statement different from that advanced by him (OED).

Examiner now asserts that the doctrine of reissue recapture prohibits allowance of any reissue claim that does not include all of the “structural features” that an Appellant mentioned in remarks traversing an anticipation rejection because the specific structural features mentioned in those remarks are absent from the rejected reissue claims.<sup>24</sup> Appellant’s use of particular phrases referring to structural features of the claim simply buttresses the broad assertion that the Examiner’s anticipation rejection based upon *Bonneau* is wholly unfounded and specious. The Examiner apparently agreed, and withdrew that rejection of apparatus patent claim 8 in the next correspondence. Moreover, the fact that this feature is wholly absent from patent claims 1 through 6 is additional evidence of the speciousness of the Examiner’s current position about the criticality of this feature. Furthermore, the fact that Appellant did bring this feature of patent claim 7 to the attention of the Examiner in the Briefs that resulted in the 22<sup>nd</sup> of July 1997 Decision by the Board is simply customary practice under the Rules.<sup>25</sup> The Examiner’s current attempt to create an estoppel from Appellant’s compliance with the Rules is not supported by either *Pannu* or *Hester*.

The extreme breath of the express language of the fourth paragraph of 35 U.S.C. §251 in

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<sup>24</sup> Unlike *Hester Industries*, Appellant made this statement but once, and the Board concurred, and refused to sustain the anticipation rejection of patent claim 7.

<sup>25</sup> Under 37 CFR §1.111(b), in order to be entitled to reconsideration or further examination, the Appellant must provide a written reply, and that “reply must present arguments pointing out the specific distinctions believed to render the claims ... patentable over the applied references.” The Examiners implementation of reissue recapture estoppel in the instant application argues that in 100% of the patents where an Appellant responds to an anticipation rejection, that Appellant’s compliance with the express requirement of 37 CFR §1.111(b) forever after estops the Appellant from obtaining allowance of any reissue claim that defines an apparatus that is structurally different from that defined by the patent claim, simply because that reissue claim lacks the “specific distinctions [that were] believed to render the [patent] claims ... patentable over any applied references.” This wholesale and blanket estoppel applies even where, as here, the anticipation rejection was frivolous and unwarranted by the prior art. Appellant here is not endeavoring to reargue the anticipation rejection based upon *Chapin*, because the Examiner has already concurred in the impropriety of that rejection, as is evidenced by the Examiner’s withdrawal of that rejection and allowance of all of the patent claims. Moreover, Appellant did not endeavor to narrow the scope of coverage of the patent claims in an effort to avoid *Chapin*, but simply explained to the Examiner, in compliance with 37 CFR §1.111(b) why *Chapin* was an improper anticipation reference. Appellant’s compliance with the rules of practice can not be said to create a reissue recapture estoppel that prevents Appellant from claiming other inventions disclosed in Appellant’s original specification.

permitting, in timely filled reissue applications, the prospect of allowance of reissue claims “enlarging the scope of the claims of the original patent”, argues against the convoluted reading of *Pannu* and *Hester Industries* now urged by the Examiner. A recognition that 35 U.S.C. §251 does not mandate that reissue claims include all of the features of either a specific one of several diverse patent or one of several features found by the Board to be patentably distinguishing in a patent claim that is directed to different subject matter, and a recognition that 35 U.S.C. §251 does not require that reissue claims that may have features that are similar to features of a particular patent claim use the verbatim language of the patent claim to define those feature, together with the fact that the *Pannu* and *Hester Industries* decisions of the Federal Circuit addressed reissue claims that differed only in scope from the patent claims while Appellant’s claim 20 is directed to structurally different subject matter than is Appellant’s patent claim 7, shows that there is no basis under the doctrine of reissue recapture to sustain the final rejection of reissue claim 20. Such action is respectfully requested.

The Examiner’s efforts to misread and ignore the numerous features of patent claim 7 advanced by Appellant and the findings by the Board of more than a single basis <sup>26</sup> for its determination that Bonneau failed to provide a proper vehicle to support an anticipation rejection of patent claim 7 is a *non sequitur* that fails to respond to either those general arguments against anticipation, or to recognize either that the patent claim 7 was found to be novel by the present of more than a single “*checking*” process, or the fact that rejected reissue claim 20 is directed to a different invention, one that involves a step of “*generating*” and defines a different invention. The Examiner’s crafting of a reissue recapture based upon one argument provided to the Board in order to demonstrate the inadequacy of Bonneau as an anticipation reference will not sustain

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<sup>26</sup> The Examiner fails to recognize that Appellant presented more than one argument to demonstrate a lack of anticipation of patent claim 7 by Bonneau, and that the Board ruled upon the preponderance of evidence rather than a single claim limitation, after finding at least two features of patent claim 7 were not taught by Bonneau. The Examiner’s attempt to create a generalization based upon one of those features is a *non sequitur*.

this rejection.

- H. **Claims 44, 45, 47 through 51, and 54 through 58 are rejected under 35 U.S.C. §251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based.**

The Examiner refers the rejection to the previous Office Action, paragraphs 53-55

The Examiner maintains the rejection of claims 20,44, 45, 47-51 and 54-58 under 35 U.S.C. §251 as being improper recapture of broadened claimed subject matter is maintained “since the Appellant has merely reiterated the Office’s opinion from the previous Office Action as found in Sections G and H of the Appellant’s response.”

The Examiner states that:

Again, the test for recapture requires the examiner to review the claim for the presence of broadening, as compared with the scope of the claims of the patent to be reissued. A reissue claim is broadened where some limitation of the patent claims is no longer required in the reissue claim. That is, a claim of a reissue application enlarges the scope of the claims of the patent if it broader in at least one respect, even though it may be narrower in other respect. In the instant case, claims 44, 45, 47-51, and 54-58 are broadened since at least one limitation, such as **displaying a lock function setting state . . . and sequentially storing and displaying a secret code of a user**, is no longer required.

The second step requires the examiner to determine whether the broadening aspects of the claim relate to subject matter that Appellant previously surrendered during the prosecution of the original application. There are two sub-steps involved with this step. Firstly, it must first be determined whether there was any surrender of subject matter in the prosecution of the original patent. The reliance by Appellant on a claim limitation to define the original patent claims over the prior art can be made by way of presentation of new/amended claims or an argument/statement by the Appellant that a limitation defines over the art. Paragraph #49 above sets forth the surrender generating limitations, that is, the limitations found in the prosecution history which were argued by the Appellant for patentability over the prior art, Secondly, since

there was a surrender of subject matter, it must be determined whether any of the broadening of the reissue claims is in the area of the surrendered subject matter. As none of claims 44, 45, 47-51, and 54-58 contain any of the surrender generating limitations, the broadened reissue claims improperly recapture surrendered subject matter.

The third step requires the analysis of the broadening and narrowing effected via the reissue claims and of the significance of the claim limitations added and deleted to determine whether the reissue claims should be barred as recapture. The limitations presented, argued, or stated to make the claims patentable over the prior art generates the surrender of claimed subject matter and is therefore referred to as the surrender-generating limitation. If a claim is presented in a reissue application that omits in its entirety, the surrender-generating limitation, that claim impermissibly recaptures what was previously surrendered, and that claim is barred under 35 USC 251. The arguments in the prosecution history directed to pointing out the specific limitations to define over the prior art, such as set forth in paragraph #49 above has resulted in the surrender of any combination of steps that does not include at least one of the surrender generating limitations. Thus, even though the claim may be narrowed in some respect not related to the surrender generating limitation, the broader claims are barred by the recapture rule.

The Examiner's assertion is a circuitry of logic, and therefore faulty. In point of fact, what the Examiner asserts to be a "surrender generating limitation" is language of one or eight claims pending in the parent patent application was in fact language which appeared in one claim presented to the Board of Patent Appeals And Interferences. Contrary to the Examiner's suggestion, this was not a limitation added to that claim which resulted in the amended claim then overcoming the plurality of outstanding art rejections.

There is no authority under 35 U.S.C. §251 which supports a rejection where the allowance of patent claim 7 was obtained not by amendment of patent claim 7, but by a written *Decision* by the Board of Patent Appeals And Interferences. Accordingly, this rejection is without merit, and its withdrawal is respectfully urged.



Moreover, the Board neither amended that claim nor stated that the addition of the Examiner's "surrender generating limitation" would place that claim in condition for allowance.

Furthermore, the Board made no ruling upon any of Appellant's seven allowed claims.

In short, the Examiner has failed to make a *prima facie* showing of reissue recapture. The fact that the Board refused to sustain a rejection, and in point of fact articulated multiple reasons why each of the plurality of art rejections could not be sustained, does not convert the language in the sole claim on appeal that may correspond to each of those reasons into a "surrender generating limitation." This rejection should not be sustained.

**Claim Rejections - 35 U.S.C. §103**

**F. Claims 9 through 13, 15 through 19, 24, 25, 29 through 33, 35 through 43 are rejected under 35 U.S.C. §103(a) as being unpatentable over Rew (5,033,085) in view of Inagaki et al (4,896,354).**

Claims 9 through 13, 15 through 19, 24, 25, 29 through 33, and 35 through 43 were rejected under 35 U.S.C. § 103 (a) as rendered obvious, and unpatentable over the Examining staff's proposed combination repeated citation of a proposed combination of Rew U.S.C. Patent No. 5,033,085 filed on the 27<sup>th</sup> June 1988, modified according to Inagaki *et al.* U.S. Patent No. 4,896,354 filed on the 11<sup>th</sup> of October 1985. Appellant respectfully repeats its traversal of these rejections for the following reasons.

In support of this rejection, the Examiner states that:

Rew teaches a method and system for controlling video and audio of a television set including a microcomputer 4 responding to input signals selectively input from a keyboard 1 or a remote control 2 for controlling the production of video and audio signals through generation of a control output SAN and PAN, a video processor and audio processor for receiving and processing video and audio signals in the form of detecting element 62, a character generating circuit incorporated within the microcomputer and a video/audio mute circuit for muting the video and audio information from being output to a display element 67 or audio speaker 66. Inagaki et al

are directed to an image reception system, i.e. a video system, including control for blocking the video outputs to be displayed on a display screen including in a similar manner, remote control 10, video processor 3, microcomputer 5, character generator 6, and a masking circuit 7 and mixing circuit 8. the previous Office Action sets forth the particular reasons for combining/modifying the prior art. The combination of references substitutes the masking and mixing circuits into Rew. Thus, the combination additionally shows the mixer generating video components by mixing the received video signal and a second video signal, in the form of generated characters, as well as a video mute circuit responding to a control output from the microcomputer which masks, i.e. prevents, the video signal from being applied to the mixer. The claimed "time period" as noted previously is defined by the period of time that simply exists between two subsequent inputs of code data; thus the prior art meets the scope thereof since a period of time exists between entry of a locking code and entry of an unlocking code, or vice versa, between an unlocking code and a locking code. When the unlocking code is entered subsequent to the video system being locked, a time period has existed between when the video system was locked and when the system was unlocked; this time period expired in the same manner as the claimed expiration of time via the fact that a subsequent entry of code was inputted. Figure 5 further shows the prompting on the screen of the entry of a code one at a time.

The primary reference, Rew'085, contemplates that when,

"no code is set up in the television set, the television set is driven normally by pressing the power key only as in the conventional way"<sup>27</sup>

and that,

"in a state that a code is set up in the television set, the television set is not driven normally when the power key is pressed ... [] there is displayed a code set-upstate, and then as a key signal corresponding to the code is input, the code set-upstate displays is released and at the same time, the video and audio signals of the

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<sup>27</sup>

Rew'085, column 1, lines 32-35.

television broadcaster are output normally.”<sup>28</sup>

The secondary reference, Inagaki *et al.* ‘354, teaches a character generator 6, a blanking or masking circuit 7 for superimposing a masking signal on the video signal received from the video detector 3 on the basis of command data drive from microcomputer 7, in order to thereby blank the vide signal. Mixing circuit 8 mixes the character information from the character generator and display controller 6 together with the output from the masking circuit 7.<sup>29</sup>

**A. The rejection of claims 7, 9 through 19, 27 through 43 and 59 fails to make a prima facie showing of obviousness under 35 U.S.C. §103(a)**

This rejection of claims 7, 9 through 19, 27 through 43 and 59 fails to meet the criteria of the Office for a *prima facie* showing of obviousness under 35 U.S.C. §103(a). According to MPEP 706.02(j), the criteria for establishing a *prima facie* case of obviousness under 35 U.S.C. §103 mandates that:

“To establish a *prima facie* case of obviousness, three basic criteria must be met. **First**, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. **Second**, there must be a reasonable expectation of success. **Finally**, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on Appellant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).”

Appellant respectfully suggests that none of these criteria has been meet by Paper No. 41.

**Claim 9**

In support of this rejection the Examining staff urged that:

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<sup>28</sup> Rew’085, lines 36-44.

<sup>29</sup> Inagaki *et al.* ‘354, column 2, lines 34-45.

“Rew operates such that during a power standby mode, a power key signal input is entered by the keyboards/remote controller (3: §7-4:3). This power key input meets the scope of the claim *lock key* or *lock key data*.”<sup>30</sup>

The Examining staff has ignored paragraphs 10 through 18 and 20 through 27 of the decision of the Board of Patent Appeals and Interferences (Paper No. 35) entered only the 22<sup>nd</sup> of July 1997, appeal No. 95-1187, which constitutes the administrative record and law of the case specific to this application. The holding of the Board and its reasoning may not be summarily dismissed by the Examining staff and a misguided effort to reconstruct the art in light of Appellant’s claims. Pending claims 9, 15, 24 and 25 contemplate, among other features,

“input of lock key data ...,”<sup>31</sup>

and,

“generating said first control output for a period of time defined by a first input of lock key data followed by a first input of a secret code and a second input of said lock key data followed by a second said input of said secret code ... .”<sup>32</sup>

These features are not met by the Examining staff’s proposed combination; instead, the manipulation of “this power key input” takes the Examining staff’s proposed combination out of the scope of claims 9, 24 and 25. Nothing in the secondarily reference cures this deficiency in the proposed combination, because Inagaki’354 uniformly initiates his “code registration” and “code verification”, as well as his “block channel registration” with “a normal television picture” being displayed as shown in figure 4 of Inagaki’354. Consequently, the Examining staff’s proposed combination fails to make a *prima facie* showing of Appellant’s process set forth in claims 9, 24 and 25. Withdrawal of the rejection therefore is required. Moreover, the failure to consider the

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<sup>30</sup> Paper No. 41, page 5.

<sup>31</sup> Claim 9.

<sup>32</sup> Claims 24 and 25.

express finding of the Board negates any suggestion of obviousness under 35 U.S.C. §103 (a).

### **Claims 9 and 15**

Unlike the Examining staff's proposed combination, Appellant's claims 9 and 15 defines, *inter alia*, a:

“[m]icrocomputer responding to inputs signals selectively input ... by controlling production of video images corresponding to said video components through generation of a control output for a period of time defined by a first input of lock key data followed by a secret code and a second input of said lock key data followed by said secret code ... .”

This, in combination with Appellant's “mixture generating said video components by mixing said first video signal and said second video signal” can only be found in the Examining staff's proposed combination through an impermissible hindsight reconstruction of the art in light of the blueprint provided by Appellant's claim 9. In fact, this is what the Examining staff has done by asserting that:

“the masking circuit (7) and mixing circuit (8) provides a substantially equivalent function (erase/mute audio/audio signals when locked) and substantially equivalent environment (video system and TVR CTV) for a substantially equivalent purpose (to providing control over viewable media) to the switching element of Rew,”<sup>33</sup>

and that:

“[i]t would've been obvious ... to modify Rew by substituting a conventional masking circuit/mixing circuit for the switching element in Rew as taught by Inagaki et al. in order to effectively blank the video/audio signals from the output terminal of the video system and prevent viewing programs considered harmful ... since the masking/mixing circuit provides advantage of the capability to simultaneously display video as well as on-screen character data, such a channel or time information, when both video and character

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<sup>33</sup>

Paper No. 41.

data are available.”<sup>34</sup>

Contrarily to the admonition of §706.02(j) of the *Manual of Patent Examining Procedure*, 8<sup>th</sup> Edition, Revision 5, the Examining staff has provided absolutely no “suggestion or motivation either reference themselves or the knowledge generally available to one of the ordinary skill of art, to modify” the primary reference according to Inagaki’354 to incorporate the masking circuit 7 and mixing circuit 8. Moreover, the teaching in the primary reference expressly negates any need for such a modification, because the primary reference, as illustrated in the enclosed modification of figures 1 and 2,

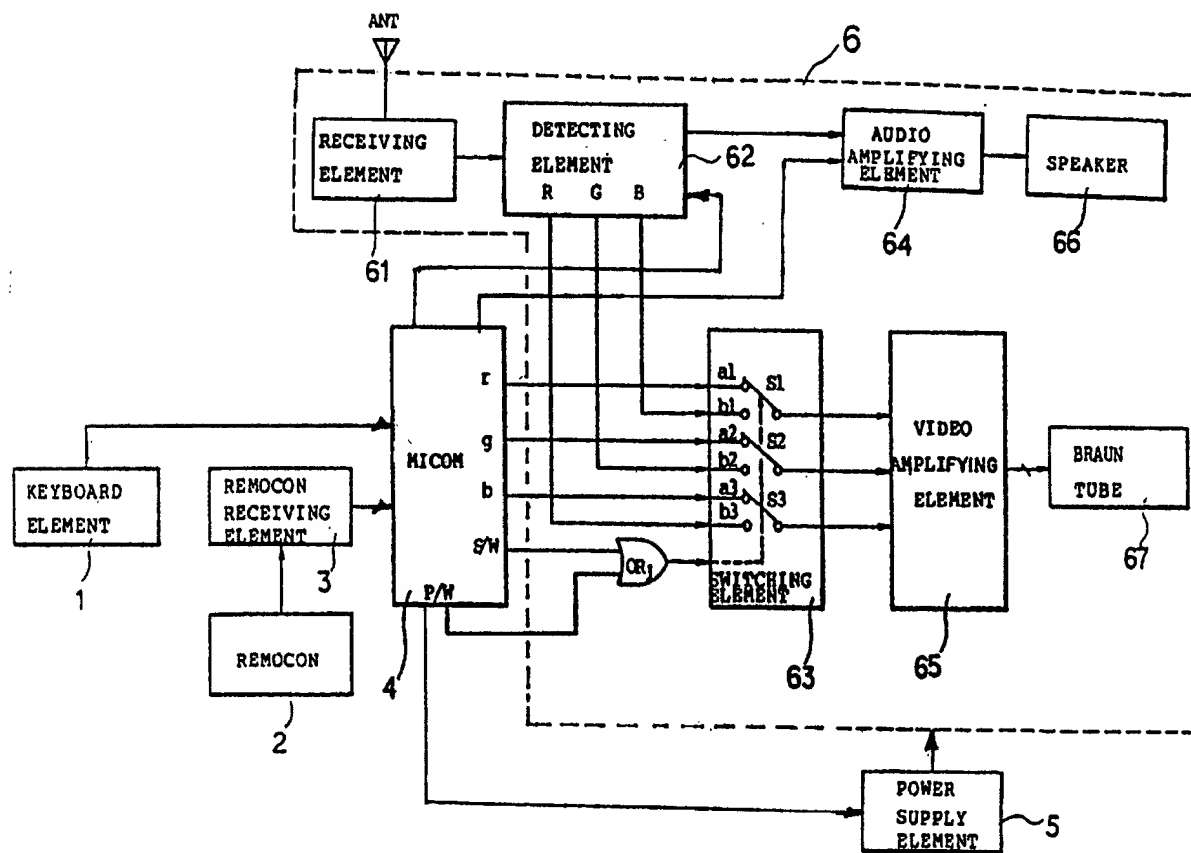
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<sup>34</sup>

Paper No. 41, page 8.

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FIG. 2



uses microcomputer 4 to create its "On-Screen character display on the Braun tube" as is demonstrated by figure 3 (A), and by figures 4 and 5. Not only is this proposed modification of the primary reference unsupported by evidence of motivation for making the modification, the modification unnecessary and produces a useless circuit. **First**, the primary reference teaches by a single video signal, namely the R,G,B video passed by "detecting element 62" and applied to "video amplifying element 65" via "switching element 63." A "mixing circuit 8" mixed two, or more, video signals such as the output of "detector 3" and "character generator 6" of Inagi '354. Recognizing that the primary reference uses but one video signal, precisely what two video signals do the Examining staff's proposed combination mix? Clarification is respectfully requested in subsequent Office correspondence. **Second**, the Examining staff has ignored the express teachings of the primary reference, which intends to operate in a very specific mode of denying any and all "unauthorized use of a television set."<sup>35</sup> This is a different mode of operation from Appellant's "video system." Specifically, Rew '085 operates in its denial of any and all "unauthorized use of a television set" with the result that:

"if a code N1 is set up ... microcomputer 4 outputs an audio erasing signal so that no audio signal is output from the audio amplifying element 64, and also outputs the video erasing and switching signals do that the switches S1-S3 of the switching element 63 are *short circuited* ... and *at the same time* the ON screen character display signals output from the microcomputer 4 are displayed on the Braun tube 67 through the switching element 63 and the video amplifying element 65."<sup>36</sup>

Consequently, there is no need to "mix" any video signals, or to use a "mixing circuit 8" from the secondary reference, or to make any other modification of the primary reference in order to obtain the absolute denial of any and all "unauthorized use of a television set" intended by the primary reference because, as explained by the primary reference,

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<sup>35</sup> See, by way of example, the especially apt characterization of the intended mode of operation of Rew '085 stated in the preambles of its claims 1 through 3.

<sup>36</sup> Rew '085, column 3, lines 17-24.



“the video and audio erasing signals are, thereafter, output *at the same time* the switching signals are output ... .”<sup>37</sup>

Unlike the primary reference, Inagaki ‘354 contemplates the use of “mixer circuit 8” in its “reception block” mode of operation, to accommodate, among video signals, a video display of “OUT BAND DATA such as an emergency broadcast data and so on from the front end 1” as well as frequency shift data from “FSK 9”;<sup>38</sup> this is unnecessary and undesired in the primary reference.

Furthermore, the modification proposed by the Examining staff would impermissibly prevent the primary reference from operating in its intended mode of operation, with,

“any person who does not know the code [being] unable to drive the television set”<sup>39</sup>.

The sole video image displayed on the Braun tube is provided by r,g,b signals provided by “Micom 4” through switching element 63, which in the teachings of the primary reference, not only avoids the possibility of an external source of a video signal being applied directly to mixing circuit 8, as is demonstrated by Appellant’s figure 2, in order to circumvent the blocking circuit and generate a video signal on the television receiver, but displays only a single image at any one time by the simple expedient of designing a circuit in which:

“the microcomputer 4 outputs an audio erasing signal so that no audio signal is output from the audio amplifying element 64, and also outputs the video erasing and switching signals so that the switches S1-S3 of the switching element 63 are short circuited to terminals a1-a3 on one side and the same time the On screen character display signals are output.”<sup>40</sup>

Without the Examining staff’s proposed combination, either surreptitious efforts to circumvent

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<sup>37</sup> Although in this passage Rew ‘085 is discussing his sequence for resetting the code, the statement is uniformly applicable to all of the operations performed by Rew ‘085.

<sup>38</sup> Inagaki ‘354, column 2, lines 41-49.

<sup>39</sup> Rew’085, column 4, line 64.

<sup>40</sup> Rew ‘085, column 3, lines 18-24.

the blocking aspect of the primary reference may not be reliably prevented due to the presence of a mixing circuit which may, in essence, be employed as a port for unauthorized video signals from another source such as a video cassette player or a DVD player, a risk that is prevented due to the absence of a mixing circuit 8 in the blocking scheme of the primary reference, or alternative sources of video signals such Inagaki '354's contemplated the use of "mixer circuit 8" in its "reception block" mode of operation, to accommodate, among video signals, a video display of "OUT BAND DATA such as an emergency broadcast data and so on from the front end 1" as well as frequency shift data from "FSK 9"<sup>41</sup>, all of which would readily defeat the absolute denial of any and all "unauthorized use of a television set" intended by the primary reference with:

"any person who does not know the code [being] unable to drive the television set"<sup>42</sup>.

This incorporation of masking circuit 7 and mixing circuit 8 from Inagi '354 into the primary reference neglects to consider that the intended mode of operation of the primary reference is stated to be:

"[a]ccordingly, the video signals output from the detecting element 62 do not pass the switching element 63, and the On screen character display signals output from the microcomputer 4 are displayed on the Braun tube 67 through the switching element 63 and the video amplifying element 65. Consequently, the user may perceive that the code is set up."<sup>43</sup>

Consequently, and ignoring *arguendo* that failure of the Examining staff's proposed combination to present a *prima facie* showing of obviousness, this rejection is impermissible, and contrary to the probation against hindsight reconstruction of the art in light of the Appellant's teachings, and

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<sup>41</sup> Inagaki '354, column 2, lines 41-49.

<sup>42</sup> Rew'085, column 4, line 64.

<sup>43</sup> Rew '085, column 3, lines 24-31. In other words, the user is alerted to the fact that the code N1 has been set up by the absence of any image appearing on Braun tube 67 that corresponds to the video signals output from the detecting element 62, because those video signals do not pass switching element 63.

it unnecessarily prevents the primary reference from operating in its intended mode of operation. Withdrawal of this rejection is therefor required.

**Claim 35**

Appellant's claim 35 contemplates the microcomputer,

“controlling broadcast of all audio sounds ... through generation of a control output for a **period of time** defined by the first input of lock key data followed by the first input of the secret code and the second input of the lock key data followed by the second input of a secret code,”

in combination with:

“a mixer generating said video components by mixing said first video signal and said second video signal ... .”

In contradistinction, the Examining staff's proposed combination lacks any aspect of Appellant's “generation of a control signal for a period of time” in the manner implemented by the Appellant, which deleteriously exposes the mixer in the proposed combination to generation of video components, a result that is explicitly contrary to the teaching of the absolute denial of any and all “unauthorized use of a television set” intended by Rew '085 so that

“any person who does not know the code [being] unable to drive the television set”<sup>44</sup>.

To assure the implementation of this intended absolute denial of any and all “unauthorized use of a television set”, Rew '085 “outputs an audio erasing signal so that no audio signal is output from the audio amplifying elements 64” under conditions of a set up of code N1. This, together with the fact that the Examining staff's proposed combination is singularly devoid of Appellant's “lock key data followed by import of the secret code” and instead proposes to substitute the power-on key therefore, is convincing *indicia* of an absence of obviousness and lack of *prima facie* demonstration of that obviousness. Withdraw of this rejection of claim 35 is therefore

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<sup>44</sup>

Rew'085, column 4, line 64.

required.

**B. The rejection of claims 9 through 13, 15 through 19, 24, 25, 29 through 33 and 35 through 43 lacks a demonstration of motivation for making the Examining staff's proposed combination under 35 U.S.C. §103(a)**

Utterly devoid from the applied art is any evidence of motivation for modifying the primary reference to incorporate a mixer from the secondary reference; the primary reference performs according to its disclosed mode of operation wholly without a mixer. The primary reference has neither need nor generation of any video signals to mix. The fact of the matter is that on the evidenc of record in this application, the Examining staff's proposed combination including Rew '085 has but a single video signal R,G,B generated by detecting element 62;<sup>45</sup> note that Rew '085 uses microcumppter 4 to generate "[t]he ON screen character display signals ... r,g,b...".<sup>46</sup>

Nowhere does the Examining staff's proposed combination pretend that the *ON screen character display signals* output from the output terminals r,g,b of the microcomputer 4 are either video signals or are interchangeable with the *video signals* output from the output terminals R,G,B of the detecting element 62; any argument to the contrary by Paper No. 41 is technical fantasy unsupported by the art of record. Precisely what video signals is the Examining staff's proposed combination intended to "mix" in "mixing circuit 8" of the Examining staff's proposed combination when "microcomputer 4" simply supplies "On Screen Character display signals r,g,b to video amplifier 65? The sole basis of record for the Examining staff's proposed modification is therefore, an impermissible reconstruction of the art in the light of Appellant's teachings, as are set forth in the pending claims. Withdrawal of this rejection is thus required.

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<sup>45</sup> Rew '085, column 2, lines 37 and 38.

<sup>46</sup> Rew '085, column 2, lines 34-41, "The *ON screen character display signals* output from the output terminals r,g,b of the microcomputer 4 or the *video signals* output from the output terminals R,G,B of the detecting element 62 are designed to be input to the video amplifying element 65 through switches S1-S3 of the switching element 63."

**C. The rejection of claims 9 through 13, 15 through 19, 24, 25, 29 through 33 and 35 through 43 fails to consider the “subject matter as a whole” as is required by 35 U.S.C. §103(a)**

35 U.S.C. §103(a) requires that “the subject matter as a whole” be considered in a determination of obviousness. Instead, the Examining staff has summarily made a piecemeal review of Appellant’s claims 9 through 13, 15 through 19, 24, 25, 29 through 33 and 35 through 43 by, among other deficiencies, ignoring the relation between Appellant’s structural and process features, and focusing upon partial aspects of the pending claims in a misguided effort to demonstrate obviousness under a point-of-novelty criterion. As one example of this discredited approach, in support of this approach to 35 U.S.C. §103(a), the Examining staff wrote in Paper No. 41 that:

“Rew discloses a method and system for controlling video ... of a television set having a standby mode of operation via the fact that a remote control receiver (3) is powered during standby to be responsive to a remote control unit (2) for subsequent powering up of the video system at turn on.”

Utterly ignored is the fact that the Examining staff’s proposed combination including Rew ‘085 is “responsive to a remote control unit (2) for subsequent simultaneously with powering up of the video system at turn on” because the Examining staff’s proposed combination has only “the power key of the keyboard element 1 or remote control 2 ... .” In essence, Paper No. 41 has inaccurately characterized selected features of the proposed combination of the prior art in an effort to reconstruct Appellant’s claims.

In another example, Paper No. 41 write that,

“[t]his power key input meets the scope of the claimed ‘lock key’ or ‘lock key data’,”

although the record is devoid of any evidence that the “power key input meets the scope of the claimed ‘lock key’ or ‘lock key data’.” Moreover, the response of the Examining staff’s proposed combination to the “power key input”, namely:

“the microcomputer 4 directs **normal** operation of the system as in

a conventional television set. In other words, the microcomputer 4 controls the detecting element 62 by the remote control key signal of the keyboard element 1 or remote control 2 to select the television broadcasting signals, and the video signals of the selected broadcasting signals are displayed on the Braun tube through the switching element 63 and the video amplifying element 65, and the audio signals are output to the speaker 66 through the audio amplifying element 64.”<sup>47</sup>

This behavior of the Examining staff’s proposed combination is not what is described by the Examining staff in Paper No. 41; that is, the description set forth in Paper No. 41 is technically inaccurate. Where, for instance, is the teaching in the proposed combination of “the scope of the claimed ‘lock key’ or ‘lock key data’?” There is not evidence of record to support this unusual characterization of the “power key of the keyboard element 1 or remote control 2.”<sup>48</sup> Moreover, this mischaracterization of the teachings of the proposed combination is fiction. Furthermore, where are such features of Appellant’s claims 7 and 28, by way of example, as:

“determining whether the lock state of said system is a locked state or an unlocked state after a last character of said secret code has been input;  
storing the input secret code as a lock secret code, clearing the display screen and locking the video system when the lock state is determined to be in said unlocked state;  
comparing the input secret code with a lock code previously stored in the microcomputer when the lock state is determined to be in said locked state...”;

of claim 29, or

“a microcomputer responding to input signals selectively input from a keyboard or a remote control receiver by controlling display of video images corresponding to said video components through generation of a control output for a period of time defined by a first input of lock key data followed by a first input of a secret code and a second input of said lock key data followed by a second input of

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<sup>47</sup> Rew ‘085, column 3, lines 3-16.

<sup>48</sup> Rew ‘085, column 2, lines 67 and 68.

a secret code;”

of Appellant’s claim 35, or

“a microcomputer responding to input signals selectively input from a keyboard or a remote control receiver by controlling broadcast of audio sounds corresponding to said audio components through generation of a control output for a period of time defined by a first input of lock key data followed by a first input of a secret code and a second input of said lock key data followed by a second input of a secret code ...”?

Paper No. 41 is silent, and despite its unusual length, Paper No. 41 fails to address these, and other, aspects of the pending claims. In point of fact, nothing in the proposed combination responds in this manner to Appellant’s lock key data. This piecemeal and incomplete approach to determinations of obviousness is unlawful under 35 U.S.C. §103(a);<sup>49</sup> consequently, this rejection should not be sustained, and claims 9 through 13, 15 through 19, 24, 25, 29 through 33 and 35 through 43 should be allowed.

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The clear inference of the Examiner’s refusal is that the Examining staff have refused the mandate by Congress articulated in both 35 U.S.C. §103(a) and by the Court to (i) determine the scope and content of the prior art, and to (ii) ascertain the differences between the prior art and the claims at issue. Nothing in the Final Rules authorizes the Technology Center to arbitrarily deny the Applicant’s statutory right to have the Office consider (i) the scope and content of the prior art, and to (ii) have the Office ascertain the differences between the prior art and the claims at issue. It should not be forgotten that the Court in *KSR Int’l v. Teleflex*, 550 U.S. \_\_\_\_ (2007) was able to obtain a realistic understanding of the state of the art as of the time of the patentee’s invention by considering numerous patent references that had not been considered during the prosecution history of the Engelgau U.S. Patent No. 6.237.565 in making a determination of obviousness. Refusal to recognize that the art contradicts the arguments of the Examiner presented in the *Paper No. 20070220*, arbitrarily denies the Applicant to have the Office consider both the state of the art as of the time of Applicant’s invention, and to the differences between that art and the claims at issue, in contravention of the mandate of 35 U.S.C. §103(a).

**2. The final rejection improperly fails to consider the differences between the subject matter sought to be patented and the prior art.**

35 U.S.C. §103(a) requires the Office when making a determination of obviousness, *vel non*, to consider “the differences between the subject matter sought to be patented and the prior art.”<sup>50</sup> Even a cursory reading of the following analysis written by the Examiner in the last two Office actions demonstrates the gross failure of the Office to comply with the requirements of 35 U.S.C. §103(a).

The Examiner has argued that,

“Contrary to the applicant’s belief, the combination of references is deemed to be suggested by the combination and is clearly set forth in the previous Office Actions. Moreover, the combination of references is deemed to teach and/or suggest the claimed subject matter, see for example above.

For example, Rew clearly shows a microcomputer/microprocessor-based controller, in the form of MICOM 4 which is responsive to a keyboard element 1 or a remote control receiver 3. Each of the keyboard element and remote control receiving element is inherently responsive to selective inputs of a user.

The MICOM subsequently controls the video and audio system to generate or block/mask media content.

Applicant’s allegations regarding the apparent non-analogous nature of Rew’s power key and to the claimed lock key data is not convincing. Applicant’s reference to the Board’s decision additionally backs the Examiner’s claim as the Board

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<sup>50</sup> 35 U.S.C. §103(a).



found “Applicant’s disclosure offers scant information about the lock key.

Although the lock key must be on the keyboard or remote control, it need not be any particular key” (par. 11 of Board Decision Paper 35).

Reference to Inagaki et al is not germane to the rejection regarding the lock key or lock key data signal since it provides a modification in regards to the masking and mixing circuits and not with respect to the input of data. Furthermore, Rew specifically identifies the “key signal” and its intended use is for locking or unlocking a code state is clearly descriptive of its function as a “lock key”.

Lastly, due to the applicant’s continued failure to clearly identify where in the original specification the claimed time period is sufficiently and distinctly set forth, the time period simply reads on the interpretation given thereto by the Examiner as set forth in the previous Office Action in paragraphs 14 and 17.

Applicant’s allegation that the combination of references “ignores the teaching of the primary reference that the only operation attributed to the ‘power key input’ is application of electrical power to the network” is neither substantiated nor correct since Rew clearly states that the key input initiates a code set-up state. Applicant’s arguments regarding questions whether the combination has novel abilities is not germane to the rejection nor does it constitute any showing of the impropriety of the combination. Thus, applicant’s argument is not convincing.

Applicant’s argument that the proposed combination is through impermissible hindsight reconstruction is unsupported by

any evidence. A clear line of reasoning is presented in the last Office Action in paragraph 19, page 7.

There is nothing in Rew that “expressly negates” any need for a modification as alleged by the applicant. The combination is simple and to the point; substituting the masking circuit 7 and mixing circuit 8 of Inagaki et al for the switching element 63 of Rew in view of the teachings of Inagaki et al to provide the capability of OSD and video simultaneously wherein the mixing circuit mixes the on screen characters and video.

The arrangement still provides the ability to define a set-up state using the OSID while masking any video upon the application of the key signal. Applicant’s arguments and allegations directed to the prevention of proper operation of Rew in the combination are not supported and is not convincing.

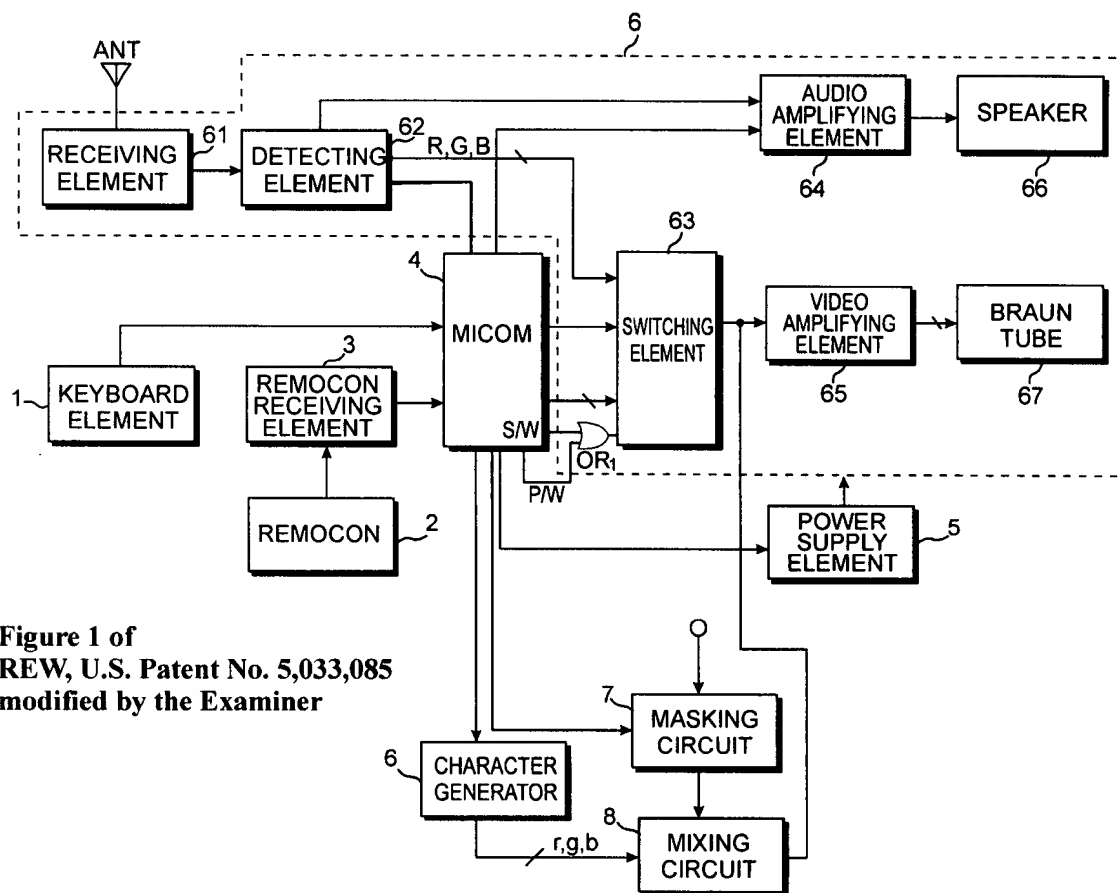
There is no hindsight reconstruction as alleged by the applicant since both of the references are directed to similar technology and similar problems and Inagaki et al provide the suggestion to provide the capability of possible simultaneous display of video and on screen characters as an advantageous improvement over the teachings of Rew to provide one or the other at a time.

Applicant’s arguments directed to the alleged lack of teaching in the prior art for the “generation of a control signal for a period of time” is not convincing, particularly in light of the interpretation of the “time period” as best understood. Applicant has yet to provide any showing from the original specification to attribute any definite meaning to the “period of time” that would differentiate from the interpretation assumed by the Office and as

spelled out previously.

Applicant's argument that the combination fails to show the "storing the input code as a lock code and barring viewing of the video program is not in said lock state" fails to address claim limitations and is therefore not convincing."

The fallacy of the Examiner's reasoning is best illustrated by the proposed combination constructed by Paper No. 20070220:



**Figure 1 of  
REW, U.S. Patent No. 5,033,085  
modified by the Examiner**

In the Examiner's proposed combination, **Switching Circuit 63** and **Mixing Circuit 8** separately and necessarily provide On-Screen Display of alpha-numeric text upon the screen of **Braun Tube 67**. Otherwise, neither **Switching Circuit 63** and **Mixing Circuit 8** has any operational function. This redundant reconstruction of the prior art in the light provided solely by Applicant can only be an impermissible hindsight reconstruction of the art in an attempt to replicate the teachings of Applicant's claims. No consideration has been given to consideration of to consider "the differences between the subject matter sought to be patented and the prior art."<sup>51</sup> Where, for example, is recognition in Paper No. 20070220 of such features of claims 9, 13, 23, 28 or 34 as Applicant's:

- "input signals selectively input by a user of the video system **during said standby mode of operation**" or Applicant's,
- "responding to input signals selectively input by a user of the video system **during said standby mode of operation**" or Applicant's,
- "a microcomputer responding to input signals selectively input by a user of the video system **during said standby mode of operation** by controlling production off video images"

in the Examiner's proposed combination.

Secondly, if **Switching Circuit 63** and **Mixing Circuit 8** separately respond to r, b, g character signals and necessarily provide On-Screen Display of alpha-numeric text upon the screen of **Braun Tube 67**, what precisely is the function and operational contribution of **Mixing Circuit 8** separately to the visual display of **Braun Tube 67**? Moreover, why are two distinct sources of r, g, b OSD character signals necessary, except in a misguided attempt to reconstruct the language of Applicant's claims?

Thirdly, what possible function and operational contribution does **Mixing Circuit 8** provide to the Examiner's proposed combination, when **Switching Circuit 63** already completely and fully meets the requirements of Rew '085 for video masking, and when no video input signal

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<sup>51</sup> 35 U.S.C. §103(a).

is applied in the Examiner's proposed combination to **Mixing Circuit 8**?

Fourthly, what possible function and operational contribution does **Masking Circuit 7** provide to the Examiner's proposed combination?

As was explained by the United States Court of Appeals for the Federal Circuit, a "*prima facie* obviousness showing" is necessary to a finding of obviousness under 35 U.S.C. §103(a).<sup>52</sup> All constituent elements of Applicant's claims 9 through 13, 15 through 19, 23, 24, 28 through 32 and 34 through 421 must be demonstrated to actually exist in the art as of the time of Applicant's invention; substitution of the Examiner's paraphrase of Applicant's claim language<sup>53</sup> is inadequate under the *subject matter as a whole* requirement of 35 U.S.C. §103(a). Consequently, absent Applicant's structure of:

- "input signals selectively input by a user of the video system **during said standby mode of operation**" or Applicant's,
- "responding to input signals selectively input by a user of the video system **during said standby mode of operation**" or Applicant's,
- "a microcomputer responding to input signals selectively input by a user of the video system **during said standby mode of operation** by controlling production off video images"

in the Examiner's proposed combination, and the foregoing advantages beneficially flowing from this structure, there is no *prima facie* showing of obviousness, even assuming *arguendo* that this structure is a "combination of familiar elements ..."<sup>54</sup> because the Examiner's combination of

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<sup>52</sup> *Leapfrog Enterprises, Inc. v. Fisher-Price, Inc. and Mattel, Inc.*, No. 06-1402, page 10 (CAFC 9<sup>th</sup> of May 2007).

<sup>53</sup> Pages 3, 4 and 5 of the Examiner's comments set forth in Paper No. 5 is a paraphrase of Applicant's claim 1; the Examiner's proposed combination does not actually use this language. As is noted in this paper, Claim 1 does not teach the relations between claim 1's constituent elements.

<sup>54</sup> *Leapfrog Enterprises, Inc. v. Fisher-Price, Inc. and Mattel, Inc.*, No. 06-1402, page 7 (CAFC 9 May 2007).

separate **Switching Circuit 63**, **Mixing Circuit 8** and **Masking Circuit 7** found in the Examiner's proposed combination are no substitute for Applicant's structure defined by claim 1 and Applicant's advantageous ability to transmit use a single mixer without concomitantly requiring the operational presence of a separate **Switching Circuit 63** and a **Masking Circuit 7**. Under 35 U.S.C. §103(a) these differences<sup>55</sup> illuminate the absence of a *prima facie* demonstration of obviousness; accordingly, the advantages flow from these differences illustrate the unpredictability of the improvements flow from Applicant's structure. This rejection is therefore inadequate to support a finding of obviousness under 35 U.S.C. §103(a); its withdrawal is respectfully urged.

An element of **common sense** must be attendant to all applications of the art to the "subject matter sought to be patented"<sup>56</sup>; consequently, these differences which were not recognized in the Examiner's comments, serve as convincing indicia of non-obviousness.

None of these or any of the other **differences** between the structures defined by Applicant's rejected claims have been considered in Paper No. 20070220. 35 U.S.C. §103(a), which requires the Office when making a determination of obviousness, *vel non*, to consider "the differences between the subject matter sought to be patented and the prior art,"<sup>57</sup> has not been met because the foregoing reading of the analysis written by the Examiner in Paper No. 20070220 demonstrates the gross failure to comply with the requirements of 35 U.S.C. §103(a). Accordingly, withdrawal of this rejection is respectfully urged.

### 3. **The final rejection is an impermissible hindsight reconstruction of the prior art in**

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<sup>55</sup> As was recently noted by the Court of Appeals, "a *signal* corresponding to a word is not the same as a *signal* corresponding to a letter." *Leapfrog Enterprises, Inc. v. Fisher-Price, Inc. and Mattel, Inc.*, No. 06-1402, page 5 (CAFC 9 May 2007).

<sup>56</sup> *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, 2007 WL 1237837, at 12 (30 April 2007). In accord, *Leapfrog Enterprises, Inc. v. Fisher-Price, Inc. and Mattel, Inc.*, No. 06-1402, page 7 (CAFC 9 May 2007).

<sup>57</sup> 35 U.S.C. §103(a).

**the light provided solely by Applicant's claims.**

In support of this rejection, the Examining staff previously erroneously asserted that in the proposed combination,

“Rew operates such that during a power standby mode, a power key signal input is entered by the keyboard/remote controller (3:67 - 4:3) *This power key input meets the scope of the claimed ‘lock key’ or ‘lock key data’*”.<sup>58</sup>

This is technically inaccurate because the primary reference, Rew’085 incorporated into the Examiner’s proposed combination contemplates that when,

“no code is set up in the television set, the television set is driven normally by pressing the power key only as in the conventional way”<sup>59</sup>

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<sup>58</sup> Final Office action.

<sup>59</sup> Rew ’085, column 1, lines 32-35. Utterly absent from both of the previous Office actions is any explanation of how the proposed combination might be re-configured to meet such features, as for example, Applicant’s claim’s 27’s “checking for an input signal ... from a lock key of said key matrix during s system power stand-by state and remaining in said stand-by state until said checking step determines that input signal have been input ... displaying prompts for setting a lock state of a lock setting function ... for displaying said prompts ... when said checking step determines that said input signal from said lock key has been input”; Does the Examiner’s proposed combination have a novel (an undisclosed) ability to distinguish whether a user manipulates a “power key” to turn on electrical power as taught by the primary reference and “remaining in a system power stand-by state” if the input signal is not Applicant’s “input signal from said lock key” as taught by Applicant’s claim 27, or to provide a “key-data input signal as being indicative of an input from , or Applicant’s claim 43’s “checking for a key-data input signal received from a user during a system power standby mode of operation until said step of checking identifies said key-data input signal as being indicative of an input from said lock key.” Does the Examiner’s proposed combination have a novel (an undisclosed) ability to distinguish whether a user manipulates a “power key” to turn on electrical power as taught by the primary reference, or to provide a “key-data input signal as being indicative of an input from said *lock key* ...” as taught by Applicant’s claim 43?

and

“in a state that a code is set up in the television set, the television set is not driven normally when the power key is pressed ... [] there is displayed a code set-up state, and then as a key signal corresponding to the code is input, the code set-upstate displays is released and at the same time, the video and audio signals of the television broadcaster are output normally.”<sup>60</sup>

The secondary reference, Inagaki *et al.* ‘354, teaches a character generator 6, a blanking or masking circuit 7 for superimposing a masking signal on the video signal received from the video detector 3 on the basis of command data drive from microcomputer 7, in order to thereby blank the vide signal. A mixing circuit 8 mixes the character information from the character generator and display controller 6 together with the output from the masking circuit 7.<sup>61</sup>

**A. The rejection of claims 9 through 13, 15 through 19, 24, 25, 29 through 33 and 35 through 43 fails to make a *prima facie* showing of obviousness under 35 U.S.C. §103(a)**

According to MPEP §706.02(j), the criteria for establishing a *prima facie* case of obviousness under 35 U.S.C. §103 mandates that:

“To establish a *prima facie* case of obviousness, three basic criteria must be met. **First**, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. **Second**, there must be a reasonable expectation of success. **Finally**, the prior art reference (or references when combined) must teach or suggest all the claim

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<sup>60</sup> Rew’085, lines 36-44.

<sup>61</sup> Inagaki *et al.* ‘354, column 2, lines 34-45.



limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)."

Applicant respectfully suggests that none of these criteria has been met by Paper No. 13.<sup>62</sup>

**Claims 9, 15, 24, 25, 29 and 35**

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<sup>62</sup> The use of hindsight in a reconstruction of past events makes it easy to declare that a particular "conclusion" *obviously* follows from a sequence of events; one historian observes however that the "conclusion" was not at the time of the occurrence of those events, obvious to contemporary participants in those events, and concludes that in actuality, hindsight corrupts and distorts the underlying facts upon which a conclusion should be based. Under 35 U.S.C. §103(a), a conclusion of *obviousness* must be made:

- (i) by weighting the *subject matter as a whole*,
- (ii) by weighting that subject matter as a whole *at the time the invention was made* as of the time when the invention was made, and
- (iii) by weighting the *subject matter as a whole* through the eyes of a person of ordinary skill in the art to which the subject matter pertains.

The rejection of claims 9, 15, 24, 25, 29 and 35 turn upon the erroneous assert by the Examining staff that in the proposed combination,

“Rew operates such that during a power standby mode, a power key signal input is entered by the keyboard/remote controller (3:67 - 4:3) *This power key input* meets the scope of the claimed ‘lock key’ or ‘lock key data’”.<sup>63</sup>

This is technically inaccurate because the primary reference, Rew’085 incorporated into the Examiner’s proposed combination contemplates that when,

“**no code** is set up in the television set, the *television set is driven normally* by pressing the power key only as in the conventional way”<sup>64</sup>

and

“in a state that a code is set up in the television set, the television set is not driven normally when the power key is pressed ... [] there is displayed a code set-up state, and then as a key signal corresponding to the code is input, the code set-upstate displays is released and at the same time, the video and audio signals of the television broadcaster are output normally.”<sup>65</sup>

The secondary reference, Inagaki *et al.* ‘354, teaches no key-data input signal comparable to Applicant’s claim 26. Utterly absent from both of the previous Office actions is any explanation of how the proposed combination might be re-configured to meet such features, as for example, Applicant’s claim 9’s,

“a microcomputer responding to input signals selectively input from

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<sup>63</sup> Final Office action.

<sup>64</sup> Rew’085, column 1, lines 32-35.

<sup>65</sup> Rew’085, lines 36-44.

a keyboard or a remote control receiver by controlling production of video images corresponding to said video components through generation of a control output for a period of time defined by a first input of lock key data followed by a secret code and a second input of said lock key data followed by said secret code;

independent claim 15's,

"a microcomputer responding to input signals selectively input from a keyboard or a remote control receiver by controlling broadcast of audio sounds corresponding to said audio components through generation of a control output for a period of time defined by a first input of lock key data followed by a secret code and a second input of said lock key data followed by said secret code;"

independent claim 24's:

"a microcomputer responsive to input signals from a keyboard or a remote control receiver for controlling the video system ... a video mute circuit responding to a first control signal output by said microcomputer ...;"

independent claim 29's:

"a microcomputer respond to input signals selectively input from a keyboard or a remote control receiver by controlling display of video images corresponding to said video components through generation of a control output for a period of time defined by a first input of lock key data followed by a first input of a secret code and a second input of said lock key data followed by a second input of a secret code;"

and independent claim 35's:

"a microcomputer responding to input signals selectively input from

a keyboard or a remote control receiver by controlling broadcast of audio sounds corresponding to said audio components through generation of a control output for a period of time defined by a first input of lock key data followed by a first input of a secret code and a second input of said lock key data followed by a second input of a secret code ... .”

The Examiner’s proposed combination ostensibly responds to Rew ‘085’s “power key input” as follows:

“Subsequent to the power key input one of two programs is run (Fig. 3A).”<sup>66</sup>

Consequently, the construction of the Examiner’s proposed combination ignores the teaching of the primary reference that the only operation attributed to the “power key input” is application of electrical power to the network. The construction of the Examiner’s proposed combination is unsupported by the prior art of record which raises several questions. **First**, does the Examiner’s proposed combination have a novel (an undisclosed) ability to distinguish whether a user manipulates a “power key” to turn on electrical power as taught by the primary reference “during in a system power stand-by state”<sup>67</sup> if the input signal is not Applicant’s “input signal from said lock key”<sup>68</sup> as taught by Applicant’s claims 9, 15, 23, 28 and 34? **Second**, does the Examiner’s proposed combination remain in “a system power stand-by state” even though a user has manipulated a “power key” to turn on electrical power as is taught by the primary reference? Clarification pursuant to 37 CFR §1.104 is respectfully requested.

The reliance of Paper No. 20060206 upon the assertion that:

“Rew operates such that during a power standby mode, a power key

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<sup>66</sup> Paper No. 13, page 5.

<sup>67</sup> Applicant’s claim 26.

<sup>68</sup> Applicant’s claim 26.

signal input is entered by the keyboards/remote controller (3: §7-4:3). This power key input meets the scope of the claim *lock key* or *lock key data*”<sup>69</sup>

ignores paragraphs 10 through 18 and 20 through 27 of the decision of the Board of Patent Appeals and Interferences (Paper No. 35) entered only the 22<sup>nd</sup> of July 1997, appeal No. 95-1187, which constitutes the administrative record and law of this application. The holding of the Board and its reasoning may not be summarily dismissed by the Examiner and a misguided effort to reconstruct the art in light of Applicant’s claims. Specifically, in Applicant’s parent application the Board expressly considered what is now pending claims which recite, among other features,

“a key-data input signal ... .”

This feature is not met by the Examiner’s proposed combination; instead, the manipulation of “this power key input” takes the Examiner’s proposed combination out of the scope of Applicant’s claims. Nothing in the secondarily reference cures this deficiency in the proposed combination, because Inagaki’354 uniformly initiates his “code registration” and “code verification”, as well as his “block channel registration” with “a normal television picture” being displayed as shown in figure 4 of Inagaki’354. Consequently, the Examiner’s proposed combination fails to make a *prima facie* showing of Applicant’s circuit set forth in claims 9, 15, 23, 28 and 34. Withdrawal of the rejection therefore is required. Moreover, the failure to consider the express finding of the Board negates any suggestion of obviousness under 35 U.S.C. §103 (a).

#### **Claims 9 and 15**

Unlike the Examiner’s proposed combination, Applicant’s claims 9 and 15 define, *inter alia*, a:

“[m]icrocomputer responding to inputs signals selectively input ...  
by controlling production of video images corresponding to said  
video components through generation of a control output for a  
period of time defined by a first input of lock key data followed by

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<sup>69</sup> Paper No. 13, page 5.

a secret code and a second input of said lock key data followed by  
said secret code ... .”

This, in combination with Applicant’s “mixer generating said video components by mixing said first video signal and said second video signal” can only be found in the Examiner’s proposed combination through an impermissible hindsight reconstruction of the art in light of the blueprint provided by Applicant’s claim 9. In fact, this is what the Examiner has done by asserting that:

“the masking circuit (7) and mixing circuit (8) provides a substantially equivalent function (erase/mute audio/audio signals when locked) and substantially equivalent environment (video system and TVR CTV) for a substantially equivalent purpose (to providing control over viewable media) to the switching element of Rew,”

and that:

“[i]t would’ve been obvious ... to modify Rew by substituting a conventional masking circuit/mixing circuit for the switching element in Rew as taught by Inagaki et al. in order to effectively blank the video/audio signals from the output terminal of the video system and prevent viewing programs considered harmful ... since the masking/mixing circuit provides advantage of the capability to simultaneously display video as well as on-screen character data, such a channel or time information, when both video and character data are available.”<sup>70</sup>

Contrarily to the admonition of §706.02(j) of the *Manual of Patent Examining Procedure*, 8<sup>th</sup> Edition, Revision 2, the Examiner has provided absolutely no “suggestion or motivation either reference themselves or the knowledge generally available to one of the ordinary skill of art, to modify” the primary reference according to Inagaki’354 to incorporate the masking circuit 7 and

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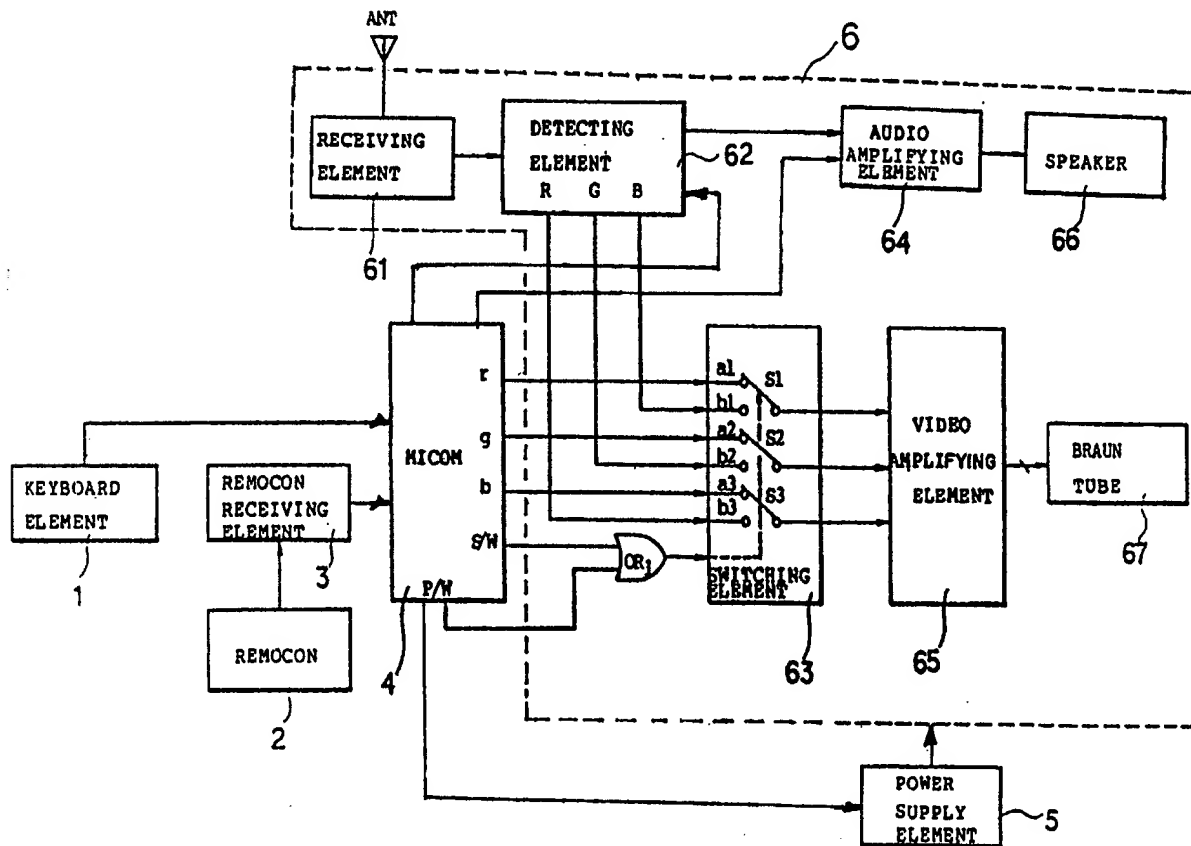
<sup>70</sup>

Paper No. 13, page 8.

mixing circuit 8. Moreover, the teaching in the primary reference expressly negates any need for such a modification, because the primary reference, as illustrated in the enclosed modification of figures 1 and 2,

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FIG. 2



uses microcomputer 4 to create its "On-Screen character display on the Braun tube" as is demonstrated by figure 3 (A), and by figures 4 and 5. Not only is this proposed modification of the primary reference unsupported by evidence of motivation for making the modification, the modification unnecessary and produces a useless circuit. **First**, the primary reference teaches by a single video signal, namely the R,G,B video passed by "detecting element 62" and applied to "video amplifying element 65" via "switching element 63." A "mixing circuit 8" mixed two, or more, video signals such as the output of "detector 3" and "character generator 6" of Inagi '354. Recognizing that the primary reference uses but one video signal, precisely what two video signals do the Examiner's proposed combination mix? Clarification is respectfully requested in subsequent Office correspondence. **Second**, the Examining staff has ignored the express teachings of the primary reference, which intends to operate in a very specific mode of denying any and all "unauthorized use of a television set."<sup>71</sup> This is a different mode of operation from Applicant's "video system." Specifically, Rew '085 operates in its denial of any and all "unauthorized use of a television set" with the result that:

"if a code N1 is set up ... microcomputer 4 outputs an audio erasing signal so that no audio signal is output from the audio amplifying element 64, and also outputs the video erasing and switching signals do that the switches S1-S3 of the switching element 63 are *short circuited* ... and *at the same time* the ON screen character display signals output from the microcomputer 4 are displayed on the Braun tube 67 through the switching element 63 and the video amplifying element 65."<sup>72</sup>

Consequently, there is no need to "mix" any video signals, or to use a "mixing circuit 8" from the secondary reference, or to make any other modification of the primary reference in order to obtain

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<sup>71</sup> See, by way of example, the especially apt characterization of the intended mode of operation of Rew '085 stated in the preambles of its claims 1 through 3.

<sup>72</sup> Rew '085, column 3, lines 17-24.



the absolute denial of any and all “unauthorized use of a television set” intended by the primary reference because, as explained by the primary reference,

“the video and audio erasing signals are, thereafter, output *at the same time* the switching signals are output ... .”<sup>73</sup>

Unlike the primary reference, Inagaki ‘354 contemplates the use of “mixer circuit 8” in its “reception block” mode of operation, to accommodate, among video signals, a video display of “OUT BAND DATA such as an emergency broadcast data and so on from the front end 1” as well as frequency shift data from “FSK 9”;<sup>74</sup> this is unnecessary and undesired in the primary reference.

Furthermore, the modification proposed by the Examiner would impermissibly prevent the primary reference from operating in its intended mode of operation, with,

“any person who does not know the code [being] unable to drive the television set”<sup>75</sup>.

The sole video image displayed on the Braun tube is provided by r,g,b signals provided by “Micom 4” through switching element 63, which in the teachings of the primary reference, not only avoids the possibility of an external source of a video signal being applied directly to mixing circuit 8, as is demonstrated by Applicant’s figure 2, in order to circumvent the blocking circuit and generate a video signal on the television receiver, but displays only a single image at any one time by the simple expedient of designing a circuit in which:

“the microcomputer 4 outputs an audio erasing signal so that no audio signal is output from the audio amplifying element 64, and also outputs the video erasing and switching signals so that the switches S1-S3 of the switching element 63 are short circuited to terminals a1-a3 on one side and the same time the On screen

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<sup>73</sup> Although in this passage Rew ‘085 is discussing his sequence for resetting the code, the statement is uniformly applicable to all of the operations performed by Rew ‘085.

<sup>74</sup> Inagaki ‘354, column 2, lines 41-49.

<sup>75</sup> Rew’085, column 4, line 64.

character display signals are output.”<sup>76</sup>.

Without the Examiner’s proposed combination, either surreptitious efforts to circumvent the blocking aspect of the primary reference may not be reliably prevented due to the presence of a mixing circuit which may, in essence, be employed as a port for unauthorized video signals from another source such as a video cassette player or a DVD player, a risk that is prevented due to the absence of a mixing circuit 8 in the blocking scheme of the primary reference, or alternative sources of video signals such Inagaki ‘354’s contemplated the use of “mixer circuit 8” in its “reception block” mode of operation, to accommodate, among video signals, a video display of “OUT BAND DATA such as an emergency broadcast data and so on from the front end 1” as well as frequency shift data from “FSK 9”<sup>77</sup>, all of which would readily defeat the absolute denial of any and all “unauthorized use of a television set” intended by the primary reference with:

“any person who does not know the code [being] unable to drive the television set”<sup>78</sup>.

This incorporation of masking circuit 7 and mixing circuit 8 from Inagi ‘354 into the primary reference neglects to consider that the intended mode of operation of the primary reference is stated to be:

“[a]ccordingly, the video signals output from the detecting element 62 do not pass the switching element 63, and the On screen character display signals output from the microcomputer 4 are displayed on the Braun tube 67 through the switching element 63 and the video amplifying element 65. Consequently, the user may perceive that the code is set up.”<sup>79</sup>

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<sup>76</sup> Rew ‘085, column 3, lines 18-24.

<sup>77</sup> Inagaki ‘354, column 2, lines 41-49.

<sup>78</sup> Rew’085, column 4, line 64.

<sup>79</sup> Rew ‘085, column 3, lines 24-31. In other words, the user is alerted to the fact that the code N1 has been set up by the absence of any image appearing on Braun tube 67 that

Consequently, and ignoring *arguendo* that failure of the Examiner's proposed combination to present a *prima facie* showing of obviousness, this rejection is impermissible, and contrary to the probation against hindsight reconstruction of the art in light of the Applicant's teachings, and it unnecessarily prevents the primary reference from operating in its intended mode of operation. Withdrawal of this rejection is therefor required.

**Claim 29**

Claim 29, defines:

"a microcomputer responding to input signals selectively input from a keyboard or a remote control receiver by controlling display of video images corresponding to said video components through generation of a control output for a period of time defined by a first input of lock key data followed by a first input of a secret code and a second input of said lock key data followed by a second input of a secret code;"

This is contrary to the mode of operation of the Examiner's proposed combination which, as previously explained, proposes to substitute a power-on key for Applicant's "lock key" and to respond to manipulation of that power-on key by using microcomputer for to direct "normal operation of the system as a conventional television set" when no code N1 is set up.<sup>80</sup> These deficiencies are not removed by the process for resetting a previously established code N1 to a new code N2 in the primary reference.<sup>81</sup>

The Examiner fails to address this deficiency in the applied art, and consequently fails to demonstrate that the proposed combination teaches or suggests all of the claim limitations, as is required by MEPP §706.2 (j). The rejection must therefore be withdrawn.

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corresponds to the video signals output from the detecting element 62, because those video signals do not pass switching element 63.

<sup>80</sup> Rew '085, column 3, line 6.

<sup>81</sup> Rew '085, column 3, lines 43-55.

**Claim 35**

Applicant's claim 35 contemplates the microcomputer,

“controlling broadcast of all audio sounds ... through generation of a control output for **a period of time** defined by the first input of lock key data followed by the first input of the secret code and the second input of the lock key data followed by the second input of a secret code,”

in combination with:

“a mixer generating said video components by mixing said first video signal and said second video signal ... .”

In contradistinction, the Examiner's proposed combination lacks any aspect of Applicant's “generation of a control signal for a period of time” in the manner implemented by the Applicant, which deleteriously exposes the mixer in the proposed combination to generation of video components, a result that is explicitly contrary to the teaching of the absolute denial of any and all “unauthorized use of a television set” intended by Rew '085 so that

“any person who does not know the code [being] unable to drive the television set”<sup>82</sup>.

To assure the implementation of this intended absolute denial of any and all “unauthorized use of a television set”, Rew '085 “outputs an audio erasing signal so that no audio signal is output from the audio amplifying elements 64” under conditions of a set up of code N1. This, together with the fact that the Examiner's proposed combination is singularly devoid of Applicant's “lock key data followed by import of the secret code” and instead proposes to substitute the power-on key therefore, is convincing *indicia* of an absence of obviousness and lack of *prima facie* demonstration of that obviousness. Withdraw of this rejection is therefore required.

Even ignoring *arguendo* that absence in the Examiner's proposed combination of

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<sup>82</sup> Rew'085, column 4, line 64.

Applicant's "lock-key input" received "by a user **during said system power stand by mode of operation**" to define Applicant's identification of that key-data input signal; in contradistinction, the Examiner's proposed combination fails to make a *prima facie* showing of obviousness. Applicant's claim 34 contemplates "storing the input code as a lock code ... and barring viewing of the video program via on-screen display system when the determination indicates that the on-screen display system is not in said lock state"; this is feature that is explicitly contrary to the intended mode of operation of both the primary reference and the Examiner's proposed combination, but which advantageously contributes to Applicant's implementation of heightened security. This alone is convincing indicia of non-obviousness. Withdrawal of this rejection is therefore required.

**B. The rejection of claims 9-13, 15-19, 24, 25, 29-33 and 35-43 lacks a demonstration of motivation for making the Examiner's proposed combination 35 U.S.C. §103(a)**

Utterly devoid from the applied art is any evidence of motivation for modifying the primary reference to incorporate a mixer from the secondary reference; the primary reference performs according to its disclosed mode of operation wholly without a mixer. The primary reference has neither need nor generation of any video signals to mix. The fact of the matter is that on the evidenc of record in this application, the Examiner's proposed combination including Rew '085 has but a single video signal R,G,B generated by detecting element 62;<sup>83</sup> note that Rew '085 uses microcumpter 4 to generate "[t]he ON screen character display signals ... r,g,b...".<sup>84</sup>

Nowhere does the Examiner's proposed combination pretend that the *ON screen character display signals* output from the output terminals r,g,b of the microcomputer 4 are either video

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<sup>83</sup> Rew '085, column 2, lines 37 and 38.

<sup>84</sup> Rew '085, column 2, lines 34-41, "The *ON screen character display signals* output from the output terminals r,g,b of the microcomputer 4 or the *video signals* output from the output terminals R,G,B of the detecting element 62 are designed to be input to the video amplifying element 65 through switches S1-S3 of the switching element 63."

signals or are interchangeable with the *video signals* output from the output terminals R,G,B of the detecting element 62; any argument to the contrary by Paper No. 13 is technical fantasy unsupported by the art of record. Precisely what video signals is the Examiner's proposed combination intended to "mix" in "mixing circuit 8" of the Examiner's proposed combination when "microcomputer 4" simply supplies "On Screen Character display signals r,g,b to video amplifier 65"? The sole basis of record for the Examiner's proposed modification is therefore, an impermissible reconstruction of the art in the light of Applicant's teachings, as are set forth in the pending claims. Withdrawal of this rejection is thus required.

**C. The rejection of claims 9-13, 15-19, 24, 25, 29-33 and 35-43 fails to consider the "subject matter as a whole" as is required by 35 U.S.C. §103(a)**

35 U.S.C. §103(a) requires that "the subject matter as a whole" be considered in a determination of obviousness. Instead, the Examining staff has summarily made a piecemeal review of Applicant's claims 9 through 13, 15 through 19, 23, 24, 28 through 32 and 34 through 42, by, among other deficiencies, ignoring the relation between Applicant's structural and process features, and focusing upon partial aspects of the pending claims in a misguided effort to demonstrate obviousness under a point-of-novelty criterion. As one example of this discredited approach, in support of this approach to 35 U.S.C. §103(a), the Examining staff wrote in Paper No. 13 that:<sup>85</sup>

"Rew discloses a method and system for controlling video ... of a television set having a standby mode of operation via the fact that a remote control receiver (3) is powered during standby to be responsive to a remote control unit (2) *for subsequent powering up* of the video system at turn on." (emphasis added)

This averment is false. Utterly ignored by the Examiner's statement is the fact that the

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<sup>85</sup> Paragraph 28 of Paper No. 20070116 expressly refers to, and purports to incorporate the rejection of claim 9-13, 15-19, 24, 25, 29-33 and 35-43.

Examiner's proposed combination including Rew '085 is:

“responsive to a remote control unit (2) ~~for subsequent~~  
simultaneously with powering up of the video system at turn on”

because the Examiner's proposed combination has only,

“the power key of the keyboard element 1 or remote control 2... .”

In essence, the final Office action has inaccurately characterized selected features of the proposed combination of the prior art in an effort to reconstruct Applicant's claims.

In another example, final Office action wrote that,

“[t]his power key input meets the scope of the claimed ‘lock key’  
or ‘lock key data’,”

although the record is devoid of any evidence that the “power key input meets the scope of the claimed ‘lock key’ or ‘lock key data’.” Moreover, the response of the Examiner's proposed combination to the “power key input”, namely:

“the microcomputer 4 directs **normal** operation of the system as in a conventional television set. In other words, the microcomputer 4 controls the detecting element 62 by the remote control key signal of the keyboard element 1 or remote control 2 to select the television broadcasting signals, and the video signals of the selected broadcasting signals are displayed on the Braun tube through the switching element 63 and the video amplifying element 65, and the audio signals are output to the speaker 66 through the audio amplifying element 64.”<sup>86</sup>

This behavior by the Examiner's proposed combination is not what is described by the Examining staff in the final Office action; that is, the description set forth in the final Office action is technically inaccurate. Where, for instance, is the teaching in the proposed combination of “the scope of the claimed ‘lock key’ or ‘lock key data’?” There is not evidence of record to support

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<sup>86</sup>

Rew '085, column 3, lines 3-16.

this unusual characterization of the “power key of the keyboard element 1 or remote control 2.”<sup>87</sup> Moreover, this mis-characterization of the teachings of the proposed combination is fiction.

The final Office action is silent, and despite its unusual length, fails to address these, and other, aspects of the pending claims. In point of fact, nothing in the proposed combination responds in this manner to Applicant’s lock key data. This piecemeal and incomplete approach to determinations of obviousness is unlawful under 35 U.S.C. §103(a); consequently, this rejection of claims 9 through 13, 15 through 19, 24, 25, 29 through 33 and 35 through 43 should be withdrawn.

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<sup>87</sup> Rew ‘085, column 2, lines 67 and 68.



**CONCLUSION**

In view of the law and facts stated herein as well as all the foregoing reasons, Appellant believes that the rejection is improper and respectfully requests that the Board refuse to sustain the outstanding rejection of claims

Respectfully submitted,



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### III. CLAIMS APPENDIX

#### Claims Under Appeal (1-33, 35-59)

1. (Twice Amended) A method for operating a video cassette recorder having a playback mode of operation for reproducing a video tape and a standby mode of operation wherein the video tape is not reproduced, the video cassette recorder including a microcomputer, at least one input device, a video signal processor generating a first video signal, a character generator receiving first control signals from the microcomputer for generating a second video [signals] signal including character data, a mixer receiving said first video [signals] signal and said second video signal and providing a mixed video signal to a first output terminal, and an audio signal processor providing an audio signal to a second output terminal, said first output terminal and said second output terminal being adapted to supply reproducible video signals and reproducible audio signals to an external television, said method comprising the steps of:

[(a)] when the video cassette recorder is in said standby mode of operation, receiving a lock function code from said input device;

[(b)] providing a code sequence to said microcomputer via said input device;

[(c)] passing said code sequence to said character generator for inclusion in said second video signal;

[(d)] when a last character of said code sequence is received by said microcomputer, immediately verifying the status of the video cassette recorder so as to determine whether said video cassette recorder is in a locked state or in an unlocked state;

[(f)] when said video cassette recorder is in said unlocked state, immediately generating a second control signal and a third control signal to terminate transmission of said first video signal to said mixer and said audio signal to said second output terminal, respectively;

[(g)] when said video cassette recorder is in said locked state, immediately comparing a stored previous code sequence with said code sequence;

[(h)] when said code sequence and said previous code sequence match, immediately terminating transmission of said second control signal and said third control so as to permit output of said first video signal and said audio signal; and

[(i)] when said code sequence and said previous code sequence do not match, passing different first control signals to said character generator for inclusion of an error indication in said second video signal.

2. A video cassette recorder having a playback mode of operation for reproducing a video tape and a standby mode of operation wherein the video tape is not reproduced, said video cassette recorder comprising:

a microcomputer;

at least one input device providing a coded sequence and a lock function signal to said microcomputer;

a video signal processor generating a first video signal;

a character generator receiving first control signals from the microcomputer for generating

9 second video signals including character data;  
10 a mixer receiving said first video signal and said second video signal and providing a  
11 mixed video signal to a first output terminal; and  
12 an audio signal processor providing an audio signal to a second output terminal,  
13 said first output terminal and said second output terminal respectively supplying  
14 reproducible video signals and reproducible audio signals to an external television,  
15 said video cassette recorder receiving said lock function signal only in said standby mode  
16 of operation,  
17 said microcomputer responding to a last character of said code sequence received by said  
18 microcomputer by immediately verifying the status of the video cassette recorder to determine  
19 whether said video cassette recorder is in a locked state and whether said video cassette recorder  
20 is in an unlocked state.

1 3. (Amended) The video cassette recorder according to claim 2, further comprising:  
2 a video muting circuit coupled between said video signal processor and said mixer [for],  
3 transmitting said first video signal; and  
4 an audio muting circuit operatively coupled to said audio processor;  
5 said microcomputer [for] immediately providing a second control signal and a third control  
6 signal to said video muting circuit and said audio muting circuit to terminate transmission of said  
7 first video signal to said mixer and said audio signal to said second output terminal, respectively,  
8 when said video cassette recorder is in said unlocked state;  
9 said microcomputer [for] immediately comparing a stored previous code sequence with  
10 said code sequence when said video cassette recorder is in said locked state;  
11 said microcomputer [for] immediately terminating transmission of said second control  
12 signal and said third control signal so as to permit output of said first video signal and said audio  
13 signal when said code sequence and said previous code sequence match; and  
14 said microcomputer [for] supplying different first control signals to said character  
15 generator so as to include an error indication in said second video signal when said code sequence  
16 and said previous code sequence do not match.

1 4. (Four Times Amended) A video [tape] recorder having a playback mode of operation  
2 for reproducing a video [tape] image and a standby mode of operation wherein the video [tape]  
3 image is not reproduced and an on screen display system, said video [tape] recorder comprising:  
4 a microcomputer [responsive] responding to input signals [for a keyboard or a remote  
5 control receiver for] from a user by controlling the video [tape] recorder;  
6 a video signal processor [for] receiving and processing for display [of] a first video signal  
7 played back from a [tape] storage medium;  
8 [an audio processor responsive to audio signals recorded on said tape for by generating  
9 voice signals;]  
10 a character generating circuit [responsive] responding to character data output from said  
11 microcomputer [for] by generating a second video signal for display;

12 a mixer [for receiving said first video signal and said second video signal and for]  
13 providing a video signal by mixing said first and second video signals [for display];

14 a video mute circuit [responsive] responding to a first control output of said  
15 microcomputer [for] by preventing said first video signal from being [output] applied to said  
16 mixer; and

17 [an audio mute circuit responsive to a second control output of said microcomputer for  
18 muting said voice signal;

19 said microcomputer [for] generating said first control output and said second control  
20 output for a period of time defined by a first input of lock key data followed by a secret code and  
21 a second input of said lock key data followed by a [said] secret code[:] and [said microcomputer  
22 for] immediately terminating transmission of said first control output upon expiration of said  
23 period of time.

1 5. (Five Times Amended) The video [cassette] recorder according to claim 4, said  
2 microcomputer [for] determining if there is a lock key data input [from said keyboard or said  
3 remote control when] while said video [tape] recorder is in a power-standby status and [controls]  
4 controlling said character generating circuit to display a corresponding prompt message on a  
5 screen requesting a user to input a secret code one character at a time[.];

6 said character generating circuit [for] changing said displayed prompt message to  
7 correspond to a desired one of a sequence of characters of said secret code said user is to input  
8 following an input of a previous one of said characters[.];

9 said microcomputer [for] storing each input character of said secret code if said input  
10 character corresponds to a numerical key of [said] the keyboard or remote control receiver,

11 said microcomputer [for] immediately checking said video [cassette] recorder to determine  
12 if said video [cassette] recorder is in a locked state after said user completes the inputting of the  
13 secret code,

14 said microcomputer [for] controlling said video mute circuit and said audio mute circuit  
15 responsive to said first control output and said second control output, respectively, to prevent  
16 output of said first video signal and to mute said voice signal if said video [cassette] recorder is  
17 determined [not] to not be in said locked state, and

18 said microcomputer [for] comparing said input secret code to a code previously stored if  
19 said video [cassette] recorder is determined to be in said locked state and, if there is a match, [for]  
20 determining that said period of time has expired and disabling said video mute circuit and said  
21 audio mute circuit.

1 6. (Thrice Amended) The video [tape] recorder according to [claims] 5, comprised of said  
2 microcomputer [for] memorizing said secret code when it is determined that said system is not  
3 in said locked state.

1 7. (Twice Amended) A locking method for controlling an on-screen display system  
2 having a lock key on a keyboard or remote control, said method comprising the steps of:

checking for a key-data input signal from said keyboard or remote control during a system power standby mode of operation, and remaining in said system power standby mode of operation until said checking step identifies said key-data input signal as being indicative of an input from said lock key;

displaying prompts, on a screen, for a lock function setting state by employing an on-screen display function when the checking step identifies said key-data input signal as being indicative of an input from said lock key and sequentially storing and displaying, on said screen, a secret code input by a user in response to said prompts;

immediately determining whether the on-screen display system is in a locked state with said on-screen display system preventing viewing of any video program other than said prompts for said lock function setting state after the secret code is input to the on-screen display system;

storing the secret code as a lock code, clearing said screen of said prompts and said secret code displayed during the displaying step, and locking the on-screen display system when the determining step determines that the on-screen display system is not in said locked state;

making a comparison between the secret code and a stored lock code already in the on-screen display system when the determining step determines that the on-screen display system is in said locked state;

displaying an error message by utilizing the on-screen display function when said comparison determines that the secret code and the stored lock code do not match each other; and

clearing the secret code from the screen [and], unlocking the on-screen display system [with said on-screen display system] and enabling said viewing when said comparison determines that the secret code and the stored lock code match each other.

8. (Twice Amended) A locking/unlocking method for a video tape recorder system having a microcomputer for controlling the video tape recorder system, a key matrix for transmitting user input information to the microcomputer, a remote control receiver for receiving remote control signals from a remote control transmitter and converting the signals into digital key data, a video signal processor for reproducing and outputting a video signal of a video program recorded on a video tape, a sound signal processor for reproducing and outputting a sound signal of the video program recorded on the video tape, an on screen display unit for receiving alphanumeric information data from the microcomputer and displaying an image signal of the alphanumeric information data on a display screen, a mixer for mixing the video signal from the video processor and the image signal from the on screen display unit and outputting the mixed signal to a TV receiver, a video mute circuit for muting the video signal from the video processor under the control of the microcomputer, a sound mute circuit for muting the sound signal from the sound processor, said method comprising the steps of:

[(a)] checking for an input signal[,] to said microcomputer, from a lock key of said key matrix during a system power stand-by state and remaining in said stand-by state until said checking step determines that said input signal has been input to said microcomputer;

[(b)] displaying prompts for setting a lock state of a lock setting function using an on screen display function for displaying said prompts on said display screen when said checking step

determines said input signal from said lock key has been input;

[(c)] storing in a memory and displaying on said display screen a secret code sequentially input by a user using the key matrix in response to said prompts;

[(d)] immediately determining whether the lock state of said video tape recorder system is a locked state or an unlocked state after a last character of said secret code has been input;

[(e)] storing the input secret code as a lock secret code, clearing the display screen and locking the video tape recorder system if the lock state is determined to be in said unlocked state;

[(f)] comparing the input secret code with a lock code previously stored in the microcomputer if the lock state is determined to be in said locked state;

[(g)] displaying an error message according to the alphanumeric information data from said microcomputer when said comparing step determines that said input secret code does [doe] not match said previously stored lock code; and

[(h)] clearing the secret code from the display screen, and unlocking the video tape recorder system [if] when said comparing step determines that said input secret code matches said previously stored lock code.

9. (Amended) A video system having a mode of operation for generating output signals having video components and a standby mode of operation wherein said output signals are not generated, said system comprising:

a microcomputer responding to input signals selectively input from a keyboard or a remote control receiver by controlling production of video images corresponding to said video components through generation of a control output for a period of time defined by a first input of lock key data followed by a secret code and a second input of said lock key data followed by said secret code;

a video signal processor receiving and processing a first video signal;

a character generating circuit responding to character data output from said microcomputer by generating a second video signal;

a mixer generating said video components by mixing said first video signal and said second video signal; and

a video mute circuit responding to said control output by preventing said first video signal from being output to said mixer.

10. (Amended) The video system of claim 9, further comprised of said microcomputer terminating transmission of said control output upon expiration of said period of time.

11. (Amended) The video system of claim 9, further comprised of said microcomputer responding to a determination that lock key data has been input from said keyboard or said remote control when said system is in said standby mode, by controlling said character generating circuit to display a corresponding message on a video screen prompting a user of said system to input a secret code one character at a time.

1       12. (Amended) The video system of claim 11, further comprised of said character  
2 generating circuit changing said displayed prompt message seriatim to display corresponding  
3 characters in a sequence of said secret code input by the user.

1       13. (Amended) The video system of claim 9, further comprising:  
2 said microcomputer making a determination of whether said system is in a locked state  
3 after completion of input of said secret code;  
4 said microcomputer generating said control output when said determination indicates that  
5 said system is not in said locked state; and  
6 said microcomputer making a comparison of said secret code to an earlier code previously  
7 stored when said determination indicates that said system is in said locked state and, when said  
8 comparison establishes a match between said secret code and said earlier code, terminating  
9 generation of said control output.

1       14. (Amended) The video system of claim 13, further comprised of said microcomputer  
2 memorizing said secret code when said determination establishes that said system is not in said  
3 locked state.

1       15. (Amended) A video system having a mode of operation for generating output signals  
2 having audio components and video components and a standby mode of operation wherein said  
3 output signals are not generated, said system comprising:  
4 a microcomputer responding to input signals selectively input from a keyboard or a remote  
5 control receiver by controlling broadcast of audio sounds corresponding to said audio components  
6 through generation of a control output for a period of time defined by a first input of lock key  
7 data followed by a secret code and a second input of said lock key data followed by said secret  
8 code;  
9 a video signal processor receiving and processing a first video signal;  
10 an audio processor generating said audio components;  
11 a character generating circuit responding to character data output from said microcomputer  
12 by generating a second video signal;  
13 a mixer generating said video component by mixing said first video signal and said second  
14 video signal; and  
15 an audio mute circuit responding to said control output by muting said audio sounds.

1       16. (Amended) The video system of claim 15, further comprised of said microcomputer  
2 terminating transmission of said control output upon expiration of said period of time.

1       17. (Twice Amended) The video system of claim 15, further comprised of said  
2 microcomputer responding to a determination that lock key data has been input from said  
3 keyboard or said remote control receiver when said system is in said standby mode, by controlling  
4 said character generating circuit to display a corresponding message on a video screen prompting

5 a user of said system to input said secret code one character at a time.

1 18. (Amended) The video system of claim 17, further comprised of said character  
2 generating circuit changing said displayed prompt message seriatim to display corresponding  
3 characters in a sequence of said secret code input by the user.

1 19. (Amended) The video system of claim 15, further comprising:  
2 said microcomputer making a determination of whether said system is in a locked state  
3 after completion of input of said secret code;  
4 said microcomputer generating said control output when said determination indicates that  
5 said system is not in said locked state; and  
6 said microcomputer making a comparison of said secret code to an earlier code previously  
7 stored when said determination indicates that said system is in said locked state and, when said  
8 comparison establishes a match between said secret code and said earlier code, terminating  
9 generation of said control output.

1 20. (Twice Amended) A process for operating a video system, comprising:  
2 making a subjective evaluation of content portrayed by a first video signal to be  
3 transmitted for reception by a video display apparatus exhibiting a system power standby mode  
4 of operation and a second mode of operation providing varying visual images corresponding to  
5 said first video signal;  
6 during said system power standby mode of operation, selectively generating a code in  
7 dependence upon said evaluation; and  
8 responding to said code by barring transmission of said first video signal to said video  
9 display apparatus.

1 21. (Amended) A method of operating a video system, comprising the steps of:  
2 providing said video system with a playback mode of operation for reproducing a video  
3 image and a standby mode of operation wherein the video image is not reproduced, the video  
4 system including a microcomputer, at least one input device, a video signal processor generating  
5 a first video signal, a character generator receiving first control signals from the microcomputer  
6 for generating second video signals including character data, a mixer receiving said first video  
7 signal and said second video signals and providing a mixed video signal to a first output terminal  
8 and an audio signal processor providing an audio signal to a second output terminal, said first  
9 output terminal and said second output terminal being adapted to supply reproducible video  
10 signals and reproducible audio signals to an external television;  
11 when the video system is in said standby mode of operation, receiving a lock function code  
12 from said input device;  
13 providing a code sequence to said microcomputer via said input device;  
14 passing said code sequence to said character generator for inclusion in said second video  
15 signal;



16 when a last character of said code sequence is received by said microcomputer,  
17 immediately verifying the status of the video system so as to determine whether said video system  
18 is in a locked state or in an unlocked state;

19 when said video system is in said unlocked state, immediately generating a second control  
20 signal and a third control signal to terminate transmission of said first video signal to said mixer  
21 and said audio signal to said second output terminal, respectively;

22 when said code sequence and a previous sequence match, immediately terminating  
23 transmission of said second control signal and said third control so as to permit output of said first  
24 video signal and said audio signal; and

25 when said code sequence and said previous sequence do not match, passing different first  
26 control signals to said character generator for inclusion of an error indication in said second video  
27 signal.

1 22. A video system having a playback mode of operation for reproducing a video image  
2 and a standby mode of operation wherein the video image is not reproduced, said video system  
3 comprising:

4 a microcomputer;

5 at least one input device providing a coded sequence and a lock function signal to said  
6 microcomputer;

7 a video signal processor generating a first video signal;

8 a character generator receiving first control signals from the microcomputer for generating  
9 second video signals including character data;

10 a mixer receiving said first video signal and said second video signal and providing a  
11 mixed video signal to a first output terminal; and

12 an audio signal processor providing an audio signal to a second output terminal,

13 said first output terminal and said second output terminal respectively supplying  
14 reproducible video signals and reproducible audio signals to an external television,

15 said video system receiving said lock function signal only in said standby mode of  
16 operation,

17 said microcomputer responding to a last character of said code sequence received by said  
18 microcomputer by immediately verifying the status of the video system to determine whether said  
19 video system is in a locked state and whether said video system is in an unlocked state.

1 23. (Amended) The video system of claim 22, further comprising:

2 a video muting circuit coupled between said video signal processor and said mixer for  
3 transmitting said first video signal; and

4 an audio muting circuit operatively coupled to said audio processor;

5 said microcomputer providing a second control signal and a third control signal to said  
6 video muting circuit and said audio muting circuit to terminate transmission of said first video  
7 signal to said mixer and said audio signal to said second output terminal, respectively, when said  
8 video system is in said unlocked state;

9        said microcomputer comparing a stored previous sequence with said code sequence when  
10 said video system is in said locked state;

11        said microcomputer terminating transmission of said second control signal and said third  
12 control signal so as to permit output of said first video signal and said audio signal when said code  
13 sequence and said previous sequence match; and

14        said microcomputer supplying different first control signals to said character generator so  
15 as to include an error indication in said second video signal when said code sequence and said  
16 previous sequence do not match.

1        24. (Amended) A video system having a playback mode of operation for reproducing a  
2 video image and a standby mode of operation wherein the video image is not reproduced, said  
3 video system comprising:

4        a microcomputer responsive to input signals from a keyboard or a remote control receiver  
5 for controlling the video system;

6        a video signal processor receiving and processing a first video signal for video display;  
7        a character generating circuit responsive to character data output from said microcomputer,  
8 generating a second video signal for said video display;

9        a mixer receiving said first video signal and said second video signal and mixing said first  
10 and second video signals for said video display; and

11        a video mute circuit responding to a first control output from said microcomputer by  
12 preventing said first video signal from being applied to said mixer;

13        said microcomputer generating said first control output for a period of time defined by a  
14 first input of lock key data followed by a first input of a secret code and a second input of said  
15 lock key data followed by a second said input of a secret code; and

16        said microcomputer terminating transmission of said first control output upon expiration  
17 of said period of time.

1        25. The video system of claim 24, further comprised of said microcomputer  
2 determining whether there is lock key data input from either said keyboard or said remote control  
3 when said video system is in a power-standby status and controlling said character generating  
4 circuit to display a corresponding prompt message on a screen requesting a user to input a secret  
5 code one character at a time;

6        said character generating circuit changing said displayed prompt message to correspond  
7 to a desired one of a sequence of characters of said secret code said user is to input following an  
8 input of a previous one of said characters;

9        said microcomputer storing each input character of said secret code when said input  
10 character corresponds to a numerical key of either said keyboard or said remote control;

11        said microcomputer checking said video system to determine whether said video system  
12 is in a locked state after said user completes input of the secret code;

13        said microcomputer controlling said video mute circuit responsive to said first control  
14 output to prevent output of said first video signal when said video system is determined not to be

15 in said locked state; and

16 said microcomputer comparing said input secret code to a code previously stored when  
17 said video system is determined to be in said locked state and, when there is a match, determining  
18 that said period of time has expired and disabling said video mute circuit.

1 26. The video system of claims 25, further comprised of said microcomputer  
2 memorizing said secret code when said system is determined to not be in said locked state.

1 27. A locking method for controlling an on-screen display system having a lock key  
2 on a keyboard or a remote control, said method comprising the steps of:

3 checking for a key-data input signal from one of said keyboard or said remote control  
4 during a system power standby mode of operation until said checking step identifies said key-data  
5 input signal as being indicative of an input from said lock key;

6 displaying prompts, on a screen, for a lock function setting state by employing an on-  
7 screen display function when the checking step identifies said key-data input signal as being  
8 indicative of an input from said lock key and sequentially storing and displaying, on said screen,  
9 a secret code input by a user in response to said prompts;

10 immediately making a determination of whether the on-screen display system is in a locked  
11 state with said on-screen display system preventing viewing of any video program other than said  
12 prompts for said lock function setting state after the secret code is input to the on-screen display  
13 system;

14 storing the secret code as a lock code, clearing said screen of said prompts and said secret  
15 code displayed during the displaying step, and locking the on-screen display system when the  
16 determination indicates that the on-screen display system is not in said locked state;

17 making a comparison between the secret code and a stored lock code already in the on-  
18 screen display system when the determination indicates that the on-screen display system is in said  
19 locked state; and

20 clearing the secret code from the screen and unlocking the on-screen display system with  
21 said on-screen display system enabling said viewing when said comparison determines that the  
22 secret code and the stored lock code match each other.

1 28. A locking/unlocking method for a video system having a microcomputer  
2 controlling the video system, a key matrix transmitting user input information to the  
3 microcomputer, a remote control receiver receiving remote control signals from a remote control  
4 transmitter and converting the signals into digital key data, a video signal processor reproducing  
5 and outputting a video signal of a video program, an on screen display unit receiving  
6 alphanumeric information data from the microcomputer and displaying an image signal of the  
7 alphanumeric information data on a display screen, and a mixer mixing the video signal from the  
8 video processor and the image signal from the on screen display unit and outputting the mixed  
9 signal to a video receiver, said method comprising the steps of:

10 checking for an input signal, to said microcomputer, from a lock key of said key matrix

11 during a system power stand-by state and remaining in said stand-by state until said checking step  
12 determines that said input signal has been input to said microcomputer;  
13 displaying prompts for setting a lock state of a lock setting function using an on screen  
14 display function for displaying said prompts on said display screen when said checking step  
15 determines that said input signal from said lock key has been input;  
16 storing in a memory and displaying on said display screen a secret code sequentially input  
17 by a user using the key matrix in response to said prompts;  
18 determining whether the lock state of said system is a locked state or an unlocked state  
19 after a last character of said secret code has been input;  
20 storing the input secret code as a lock secret code, clearing the display screen and locking  
21 the video system when the lock state is determined to be in said unlocked state;  
22 comparing the input secret code with a lock code previously stored in the microcomputer  
23 when the lock state is determined to be in said locked state;  
24 displaying an error message according to the alphanumeric information data from said  
25 microcomputer when said comparing step determines that said input secret code does not match  
26 said previously stored lock code; and  
27 clearing the secret code from the display screen, and unlocking the video system when said  
28 comparing step determines that said input secret code matches said previously stored lock code.

1 29. (Amended) A video system having a mode of operation for generating output signals  
2 having video components and a standby mode of operation wherein said output signals are not  
3 generated, said system comprising:

4 a microcomputer responding to input signals selectively input from a keyboard or a remote  
5 control receiver by controlling display of video images corresponding to said video components  
6 through generation of a control output for a period of time defined by a first input of lock key data  
7 followed by a first input of a secret code and a second input of said lock key data followed by a  
8 second input of a secret code;

9 a video signal processor receiving and processing a first video signal;

10 a character generating circuit responding to character data output from said microcomputer  
11 by generating a second video signal;

12 a mixer generating said video components by mixing said first video signal and said  
13 second video signal; and

14 a video mute circuit responding to said control output by preventing application of said  
15 first video signal to said mixer.

1 30. The video system of claim 29, further comprised of said microcomputer terminating  
2 transmission of said control output upon expiration of said period of time.

1 31. The video system of claim 29, further comprised of said microcomputer responding  
2 to a determination that lock key data has been input from said keyboard or said remote control  
3 when said system is in said standby mode, by controlling said character generating circuit to

4 display a corresponding message on a video screen prompting a user of said system to input a  
5 secret code one character at a time.

1 32. The video system of claim 31, further comprised of said character generating circuit  
2 changing said displayed prompt message seriatim to display corresponding characters in a  
3 sequence of said secret code input by the user.

1 33. The video system of claim 29, further comprising:  
2 said microcomputer making a determination of whether said system is in a locked state  
3 after completion of input of said secret code;  
4 said microcomputer generating said control output when said determination indicates that  
5 said system is not in said locked state; and  
6 said microcomputer making a comparison of said secret code to an earlier code previously  
7 stored when said determination indicates that said system is in said locked state and, when said  
8 comparison establishes a match between said secret code and said earlier code, terminating  
9 generation of said control output.

1 35. (Amended) A video system having a mode of operation for generating output signals  
2 having audio components and video components and a standby mode of operation wherein said  
3 output signals are not generated, said system comprising:  
4 a microcomputer responding to input signals selectively input from a keyboard or a remote  
5 control receiver by controlling broadcast of audio sounds corresponding to said audio components  
6 through generation of a control output for a period of time defined by a first input of lock key data  
7 followed by a first input of a secret code and a second input of said lock key data followed by a  
8 second input of a secret code;  
9 a video signal processor receiving and processing a first video signal;  
10 an audio processor generating said audio components;  
11 a character generating circuit responding to character data output from said microcomputer  
12 by generating a second video signal;  
13 a mixer generating said video components by mixing said first video signal and said  
14 second video signal; and  
15 an audio mute circuit responding to said control output by muting said audio sounds.

1 36. The video system of claim 35, further comprised of said microcomputer terminating  
2 transmission of said control output upon expiration of said period of time.

1 37. (Amended) The video system of claim 35, further comprised of said microcomputer  
2 responding to a determination that lock key data has been input from said keyboard or said remote  
3 control receiver when said system is in said standby mode, by controlling said character  
4 generating circuit to display a corresponding message on a video screen prompting a user of said

5 system to complete entry of one of said first input or said second input one character at a time.

1 38. The video system of claim 37, further comprised of said character generating circuit  
2 changing said displayed prompt message seriatim to display corresponding characters in a  
3 sequence of said secret code input by the user.

1 39. (Amended) The video system of claim 35, further comprising:  
2 said microcomputer making a determination of whether said system is in a locked state  
3 after completion of each said entry of said secret code;  
4 said microcomputer generating said control output when said determination indicates that  
5 said system is not in said locked state; and  
6 said microcomputer making a comparison of said second input of a secret code to said first  
7 input of a secret code when said determination indicates that said system is in said locked state  
8 and, when said comparison establishes a match between said second input of a secret code and  
9 said first input of a secret code, terminating generation of said control output.

1 40. The apparatus of claim 38, with said microprocessor having a memory storing a  
2 reference, said microprocessor comparing said second lock-key signal with said reference and  
3 generating an error signal when said second lock-key signal is not identical to said reference.

1 41. The apparatus of claim 40, with said character generator applying an error message  
2 signal to said mixer when said second lock-key signal is not identical to said reference.

1 42. The apparatus of claim 41, generating a second video signal representing that said  
2 second lock-key signal is not identical to said reference by with said mixer mixing said error  
3 message signal with said video signal.

1 43. The apparatus of claim 38, with said mute circuit locking said audio processor and  
2 preventing said audio signal from being transmitted outside of said audio processor during said  
3 interval of time.

1 44. (Twice Amended) A process for locking and unlocking a signal, comprising the steps  
2 of:  
3 receiving from a keyboard a first lock key data signal;  
4 generating a first character signal in response to said first lock-key data signal;  
5 generating a video signal reproduced from a recording medium;  
6 mixing said video signal and said first character signal;  
7 displaying on a screen a first image representing said video signal and said first character  
8 signal;  
9 receiving a second lock-key data signal after receiving said first lock-key data signal;  
10 generating a second character signal in response to said second lock-key data signal;

11 mixing said video signal and said second character signal;  
12 displaying on a screen a second image representing said video signal and said second  
13 character signal;  
14 making a determination of whether said second lock-key data signal is identical to said  
15 first lock-key data signal;  
16 locking said video signal by preventing application of said video signal to enable said  
17 mixing in dependence upon said determination.

1 45. The process of claim 44, further comprised of the step of:  
2 releasing said locked video signal and applying said video signal to said mixer after said  
3 video signal has been prevented from being mixed with said character signal.

1 46. The process of claim 44, further comprised of the steps of :  
2 generating an error message signal in accordance with said determination when said  
3 second lock-key data signal is not identical to said first lock-key data signal;  
4 mixing said error message signal with said video signal; and  
5 displaying a third image representing said error message signal and said video signal.

1 47. The process of claim 44, further comprised of the steps of:  
2 generating an audio signal reproduced from said recording medium; and  
3 locking said audio signal and releasing said muted video signal in dependence upon said  
4 determination.

1 48. A process for locking and unlocking a signal, comprising the steps of:  
2 receiving a first lock key data signal;  
3 generating a first character signal in response to said first lock-key data signal;  
4 generating a video signal reproduced from a recording medium;  
5 mixing said video signal and said first character signal;  
6 displaying a video image representing said video signal and said first character signal;  
7 receiving a second lock-key data signal after receiving said first lock-key data signal;  
8 generating a second character signal in response to said second lock-key signal;  
9 mixing said video signal and said second character signal;  
10 making a determination whether a locking state of barring said mixing of said video signal  
11 or an unlocking state of permitting said mixing of said video signal is in effect; and  
12 changing said unlocking state and said locking state in accordance with said determination.

1 49. The process of claim 48, further comprised of the step of locking said video signal  
2 and barring said video signal from being mixed with said second character signal in response to  
3 said determination when said unlocking state is in effect.

1 50. The process of claim 48, further comprised of the step of making a second

determination of whether said second lock-key data signal is identical to a reference.

51. The process of claim 50, further comprised of the step of changing said unlocking state and said locking state in dependence upon said second determination.

52. The process of claim 50, further comprised of the step of generating an error message signal in response to said second determination when said second lock-key data signal is not identical to said reference.

53. The process of claim 50, further comprised of the steps of:  
mixing said video signal and said error message signal; and  
displaying an error image representing said error message signal and said second character signal.

54. The process of claim 48, further comprised of the steps of:  
generating an audio signal reproduced from said recording medium; and  
changing a lock state of preventing dissemination of said audio signal and an unlocking state of disseminating said audio signal in accordance with said determination.

55. (Amended) A process for locking and unlocking a signal, comprising the steps of:  
receiving a first lock key data signal;  
generating a first character signal in response to reception of said first lock key data signal;  
receiving a video signal;  
mixing said video signal and said first character signal;  
receiving a second lock key data signal;  
generating a second character signal in response to second lock key data signal;  
mixing said video signal and said second character signal;  
making a determination whether said second lock key data signal is identical to a reference; and  
locking and unlocking said video signal in dependence upon to said determination by preventing said mixing of said video signal during said locking and permitting said mixing of said video signal during said unlocking.

56. (Amended) A process for locking and unlocking a signal, comprising the steps of:  
receiving a first lock key data signal;  
generating a first character signal in response to said first lock key data signal;  
receiving an audio signal;  
mixing said first character signal and a first video signal;  
displaying a first video image in correspondence with said mixing of said first character signal and said first video signal;  
receiving a second lock-key data signal after receiving said first lock-key data signal;



9           generating a second character signal and a mode change signal in response to said second  
10 lock-key data signal;  
11           mixing said first character signal and a second video signal;  
12           displaying a second video image in correspondence with said mixing of said first character  
13 signal and said second video signal; and  
14           changing a locking state and an unlocking state of said audio signal in accordance with  
15 said mode change signal by preventing dissemination of said audio signal during said locking state  
16 and accommodating said dissemination during said unlocking state.

1           57. The process of claim 56, further comprised of the steps of:  
2           generating a third video signal; and  
3           changing between a locked state by preventing said third video signal from being mixed  
4 with said character signal and an unlocked state of allowing said third video signal to be mixed  
5 with said character signal in response to said mode change signals.

1           58. (Amended) The process of claim 56, further comprised of the steps of:  
2           making a determination of whether said second lock-key signal is identical to a reference;  
3           generating an error message signal in accordance with said determination when said  
4 second lock-key signal is not identical to said reference;  
5           mixing said character signal and said error message signal; and  
6           displaying an error image representing said character signal and said error message signal.

1           59. A locking method for controlling an on-screen display system having a lock key  
2 on a keyboard or a remote control, said method comprising the steps of:  
3           checking for a key-data input signal received from a user during a system power standby  
4 mode of operation until said step of checking identifies said key-data input signal as being  
5 indicative of an input from said lock key;  
6           displaying prompts, on a screen of a display device, for a lock function setting state by  
7 employing an on-screen display function when the checking step identifies said key-data input  
8 signal as being indicative of an input from said lock key and sequentially storing and displaying,  
9 on said screen, an input code input by a user in response to said prompts;  
10           after the input code is input to the on-screen display system, making a determination of  
11 whether the on-screen display system is in a locked state where said on-screen display system bars  
12 viewing of a video program;  
13           storing the input code as a lock code, clearing said screen of said prompts and said input  
14 code displayed during the displaying step, and barring viewing of the video program via the on-  
15 screen display system when the determination indicates that the on-screen display system is not  
16 in said locked state;  
17           making a comparison between the input code and a stored code already in the on-screen  
18 display system when the determination indicates that the on-screen display system is in said  
19 locked state; and

20        clearing the input code from the screen and permitting viewing of the program via the on-  
21 screen display system with said on-screen display system enabling said viewing when said  
22 comparison determines that the input code and the stored lock code match each other.

**IX. EVIDENCE APPENDIX**

None

**X. RELATED PROCEEDINGS APPENDIX**

None.